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ABSTRACT

These nine cooperative extension bulletins provide basic information on various alternative agricultural enterprises. Discussed in the first eight bulletins are the following topics: business ownership (sole proprietorship, partnership, incorporation, cooperatives); business and the family (goals, qualifications, ways of ensuring family support, space needs, friends and neighbors, financial resources, start-up costs, time management); licenses and legal requirements (local, state, and federal requirements; consumer protection; employee protection; environmental protection; and licenses and permits); cost accounting (cost frameworks, allocation percentages, cost accounting systems, system design, management applications); budgets and the budget process (types of budgets, budget development, budget interpretation, enterprise budgets, break-even analysis, and sensitivity analysis); identification of domestic markets (obstacles to indirect marketing, packing and shipping, market outlets, market information); direct marketing of produce to consumers (farm markets; product sales potential; market research; marketing options; location, site selection, and facilities; merchandising strategies; promotional strategies); and international marketing (pros and cons, market entry, program modification, and payment arrangements). The final booklet is an annotated bibliography of 162 publications and 16 organizations for nurseries, landscapers, and groundskeepers. (MN)

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ED 364 713

Alternative Agricultural Enterprises

Production, Management & Marketing

Cooperative Extension Service
University of Idaho

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Business ownership

L. K. Fox

What is the best choice of type of ownership for your business? As an entrepreneur, you must decide which type of ownership is most appropriate. You should consider factors such as start-up costs, the amount of control you desire, the amount of personal risk you are willing to assume, and your need for assistance in business management. Table 1 summarizes the advantages and disadvantages of four types of business ownership — sole proprietorship, partnership, incorporation, and cooperative. You must be the one to decide which is best for you.

Sole proprietorship

The most common form of business ownership is the sole proprietorship, sometimes called the individual proprietorship. This business is owned by one person. It is usually operated by the owner, possibly with the help of family members or a few employees. Sole proprietorships can usually operate with very limited capital resources.

The sole proprietorship is the least complicated form of ownership and the easiest to enter and terminate. Entry requires little more than a location, expertise in the area of business considered, a source of capital, the ability to make contacts, and the desire to start your own business. Termination generally requires paying your debts and closing your doors.

What does it mean legally?

As a sole proprietor, your liability is limited to your own errors and obligations. But in case the business fails, your personal assets — including home, automobile, and other properties — are subject to claim by creditors. You can deal with the problem of unlimited personal liability to a certain extent by purchasing business liability insurance. However, as a sole proprietor you would still be personally liable for any business debts or loans because liability insurance only protects against claims arising from a business-related injury.

As a sole proprietor, you must be all things to your business — or be willing to pay for professional help. You must be willing to work long hours, establish a record-keeping system, prepare tax reports, and hire and train personnel. As sole proprietor, you must arrange any financing your business needs as well as pay your creditors. All of these abilities are seldom possessed by one person.

What about taxes?

One main advantage of a sole proprietorship is its tax advantage. Your business is not a separate tax-paying or tax-reporting unit; it is treated as part of your overall financial activities. You should keep separate records of business income, deductions, inventories, and capital acquisitions. This profit or loss is combined with other personal income for tax purposes. As the personal income tax rate is often lower than the corporate one, taxes are generally lower for the sole proprietor.

Partnership

Forming a partnership can be a challenge. Like a marriage, a partnership requires understanding, tact, and negotiation. Disagreements between partners account for a large number of business closings. No matter how well the partners know each other or how long they have been friends, the partnership cannot survive without a written agreement or contract.

Articles of co-partnership

Articles of co-partnership ensure each partner does his or her share of the work and gets a fair share of the profits. Certain items should be included in the agreement. You might want to use the following as a checklist when reviewing your partnership agreement. It should include:

- Date of the agreement.
- Names and addresses of all the partners.

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Table 1. Advantages and disadvantages of types of ownership.

Forms of ownership	Advantages	Disadvantages
Sole proprietorship	1. Low start-up costs 2. Greatest freedom from regulation 3. Owner in direct control 4. Minimal working capital requirements 5. Tax advantage to small owner 6. All profits to owner	1. Unlimited liability 2. Business ceases at death of owner 3. Difficulty in raising capital
Partnership	1. Ease of formation 2. Low start-up costs 3. Additional sources of venture 4. Broader management base 5. Possible tax advantage	1. Unlimited liability 2. Business may cease at death of a partner 3. Divided authority 4. Difficulty in raising additional capital 5. Difficulty in finding suitable partners
Corporation	1. Limited liability 2. Specialized management 3. Transferable ownership 4. Continuous existence 5. Legal entity 6. Possible tax advantages 7. Ease of raising capital	1. Close regulation 2. Most expensive form to organize 3. Charter restrictions 4. Extensive record-keeping 5. Double taxation
Cooperative	1. Smaller-than-usual capital investment 2. Divided authority 3. Possible difficulties in cancelling 4. Economical purchasing of supplies 5. Shared expenses for trade shows/exhibits	1. Some loss of independence 2. Less working capital than normally required 3. Joint decision making 4. Concern of quality control

- Nature of the business.
- Duration of the partnership.
- Managerial duties of each general partner.
- Specification of each type of limited partner. (whether silent, dormant, secret, or nominal) and the liability, if any, of each.
- Fee to be paid any nominal partner.
- Amount of investment by each partner.
- How profits and losses will be shared.
- Accounting procedures to be used.
- Salary or drawing account arrangements for each partner.
- Restraints on each partner, if any.
- How the partnership will be terminated.

The last item is extremely important. Provisions must be made to dissolve the partnership in case one partner wants to leave the business for other employment or because of illness or death. Arrangements must be made to equitably dissolve the partnership.

The articles of co-partnership should be written by a lawyer, notarized or witnessed by an uninvolved party, filed in the county clerk's office at the county courthouse, and a copy kept in a safe place. It is a contract and, therefore, legally binding. The Uniform Partnership Act, drafted by the National Conference of Commissioners on Uniform State Laws and approved by the American Bar Association, should be consulted as a guide.

What about taxes?

You report and pay taxes on a partnership like you would in a sole proprietorship; you and your partner pay income taxes on individual shares of the profits, but no tax is paid on the partnership. You report your share of the profit earned during the tax period that ends within the year being reported (by December 31 or June 30). This is done whether or not profits are actually distributed. The rate of tax is the same as for the individual, and the income is reported on an individual 1040 form (Schedule E). A partnership return has to be filed with the IRS for information purposes only (Form 1065).

You and your partner are personally liable, including personal assets, for debts and judgments. Creditors can collect from either you or your partner — even if you did not necessarily contract the debt.

Incorporation

A corporation is by far the most structured and complicated form of business ownership. Very rarely does the new or first-time owner form a corporation. A successful sole proprietor or a partnership that wishes to expand or to remove the personal unlimited liability is most likely to move to the corporate form. Since the corporation is a creation of law, it is imper-

sonal and exists apart from the individuals who share its ownership.

A corporation must be chartered. When the state issues a charter, your firm's activities are specified. A firm incorporated as a drug store could not legally engage in manufacturing. The geographic area in which the firm can operate is limited to the state granting the charter.

If you incorporate your sole proprietorship, you can exchange the assets owned for shares of stock. This may be done tax-free if you, or you and your partner, own 80 percent of the stock, have immediate control of the corporation, and the assets are transferred solely in exchange for stock and securities in the new corporation.

Articles of incorporation

After you file the articles of incorporation with the secretary of state and pay the one-time $60 fee, you will receive a certificate of incorporation. The following list will help you prepare your application, which needs to include:

- Specific name of your corporation (which in the United States includes the abbreviation "Inc."). The name cannot be the same as one already in use when the charter is issued
- Specific purpose of your corporation.
- Names and addresses of the directors and incorporators. Depending on the state, one to five incorporators must reside in the state in which the application is made.
- Location of your company's main office.
- Duration of your corporation.
- Amount and kinds of capital stock issued at the outset of the operations.
- Full description of the voting rights of the stockholders.

You should also draw up a set of bylaws. The bylaws should state the regulations and limits of the corporation. This protects all the owners, present and future, from unwise or selfish decisions by the board of directors.

From the time you pay the charter fee and the certificate is issued, all agreements are made in the name of the company and not in your name. You become a stockholder who may or may not be involved in the actual operation of the business. For more information on incorporating, contact the Secretary of the State of Idaho, Statehouse Room 203, Boise, Idaho 83720, (208) 334-2300.

What about taxes?

Corporations are taxed more than sole proprietorships and partnerships. Not only must taxes be paid by the corporation itself, but if you take a profit from the corporation, you must pay personal income tax on the profit. You may be able to forestall this "double taxation" by forming a subchapter corporation, which is ideal for new and low-income businesses. Consult an attorney before forming a subchapter corporation. With this type of ownership, your corporation may be taxed at lower rates. Regardless, corporate profits are taxed at a higher percentage or bracket than personal taxes.

Corporate tax reporting may be done in two ways:

1. The corporation is treated as a separate taxpayer and pays a corporate tax on its net income. As a shareholder you pay personal tax on salary, dividends, and interest you receive from the corporation.
2. Under the Subchapter Section of the Internal Revenue Code, the corporation reports its income or loss. As shareholder you report income on your tax return, even if you have not withdrawn money or property from the corporation. If the corporation incurs losses, you can deduct losses on your tax return.

Under the first method, anything you do not withdraw is taxed at a corporate level and then taxed again when you withdraw it. The second method avoids this.

Cooperative

A business formed by a group of people to obtain services or products more effectively and economically than they could get individually is called a cooperative. Members of the cooperative own, finance, and operate the business for mutual benefit. As a small and home-based business owner you may want to form a cooperative to overcome the barriers of limited market access due to rural isolation, limited access to sources of supply due to rural isolation (which may restrict the availability of quality supplies in economical quantities), and limited business training and skills of producers.

Cooperatives are similar to corporations except net income paid to owners/users is taxed as personal income, ownership benefits can be distributed in proportion to use, control is democratic with one vote per patron, service or product is sold at cost, and there is limited return on equity capital. All income is distributed to members on a participation basis. Therefore, cooperative organizations come under no state or federal income tax liability.

Like a sole proprietorship, partnership, or corporation, a cooperative must operate as a business with complete planning, management, and written policies. The cooperative should retain an attorney to ensure the proper legal procedures are followed in setting up the cooperative.

Remember...

Keep in mind rules and laws change. It is always wise to check with the agencies responsible for the most current information on business ownership and legal obligations.

For further reading

Consult the free publication, *Starting a Business in Idaho*, available from the Idaho Department of Commerce, 700 West State Street, Boise, ID 83720, (208) 334-2470.

To order copies of this or other University of Idaho College of Agriculture publications, contact the University of Idaho Cooperative Extension System office in your county or write to Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83843-4196 or call (208) 885-7982. Idaho residents add 5 percent sales tax.

The author — Linda Kirk Fox, Extension family economics and management specialist, University of Idaho, Margaret Ritchie School of Home Economics, Moscow. The author gratefully acknowledges Ray Prigge, director, District IV Extension, University of Idaho, for permission to adapt *Minding Your Business at Home, Choosing the Type of Business Ownership.*

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Business and the family

L. K. Fox

The day-to-day routine of running a business out of the home can result in family conflicts. New stresses and demands can affect not only the family, but neighbors as well. Families need to plan new businesses together: how much space will be dedicated to the business? how much time and energy will be needed to run it? who will be involved? The goal of this publication is to help you avoid conflict and achieve a balance between your business and your family life.

Goals

Hold a family council *before* the business is set up. Sit down with your family and identify the advantages and disadvantages of a home-based business. Consider your needs and goals. What needs will your home business fulfill? Do you want the achievement and recognition a successful business will bring? Do you want to be your own boss and more in control of your work? Are you creative and do you want an outlet for your creative expression? Do you want to determine where the business is located and what the hours of operation will be? Do you desire a business in your home to allow greater flexibility and more time with your family?

Qualifications

Once you have established your goals, then consider your chances for success. Operating a business takes certain skills and personal qualities, but you may be more qualified than you think. Few people have all of the skills needed to run a business, so they compensate by hiring staff or consultants and by becoming more knowledgeable through education or training.

Assess your skills in each of the following areas. Consider your past jobs, volunteer work, positions in organizations, and personal traits. Under each heading list your experience and qualifications.

Organization and planning — setting and following through on goals, time commitments, and work schedules.

Handling money — determining budgets, securing loans, raising funds, keeping financial records, and completing income tax forms.

Selling ideas and products — determining sales quotas and projections; presenting projects to or for committees, organizations, and administrative groups; selling to customers.

Management — handling the management or a part of it for a small business or an agency; serving as director or major officer of an organization.

Working with people — arbitrating between people with opposing views; handling complaints for an organization or company; organizing and planning large public events; holding officer or executive secretary positions in an organization.

Ability to take risks — taking moderate, calculated risks in varied situations: those where the chance of winning was not so small as to be a gamble or so large as to be a sure thing, but where there was a reasonable and challenging chance of success.

Willingness to lead and work alone — handling situations that required you to be self-disciplined, that were ambiguous and full of uncertainty as to the job requirements, that required you to be efficient in the midst of an emergency or crisis.

Personality traits — taking the initiative in situations where you were expected to accept and accomplish more than your share of the work; being willing to establish high standards of performance for yourself.

Knowledge and/or skill — having competence in the service or product offered by your business.

You do not necessarily need all the experience listed above. You can learn additional skills or pay someone

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who has the skills you lack. However, you must assess your strengths and weaknesses honestly before you decide whether you can spend the time to learn what you need to know or whether you can afford to hire staff or consultants. Only you can assess whether you have the right expertise to succeed.

Personal/family inventory

After thinking through your experience and qualifications, list your assets that can help you realize earnings from a family business.

Education — that which you and other family members have completed or could complete.

Professional and other skills — those for which you are trained and licensed and those you and your family do very well.

Hobbies and other interests — those you enjoy enough to try in a business venture; experiences and contacts with others that could lead to a business.

Ensuring family support

While your business may involve a great deal of your time, energy, and money, you do not need to sacrifice your family. You do not have to choose between a happy family and a successful business; you do have to establish priorities and manage time so that neither the family nor the business is neglected. Discuss with your family the plans for a new business and the changes it may bring for the family. The following suggestions are a few ways you can accommodate both business and family.

- Start your business before you have children or when the children are older, or operate part-time while the children are very young.
- Store expensive or dangerous equipment or supplies safely away from young children.
- Involve the older children in the business.
- Divide home responsibilities with your spouse or hire help.
- Allow time for family vacations.
- Limit business activities to weekends or to a specified day of the week.

Space needs

Analyzing your business from the standpoint of space is an important early step. Does your business require storage space, an area for customer interaction, or specialized tools and equipment? You'll need to provide separate areas big enough to perform the work that have the conveniences necessary for the business — phone connections, water supply, electrical hookups, sound barriers, and access for pickup and delivery. Space separations that clearly distinguish between family and business work areas are required for tax deductions as business expenses.

Will customers be visiting your home as part of your business? When you interact with them, you need to ensure a lack of interruptions and possibly even privacy. The most convenient part of the house for customer interaction, pickup, and delivery is often the most shared and public part of the house — kitchen, dining, and living rooms. This can create conflict. Keep communicating with your family; encourage an ongoing dialogue between the business and family concerns. Family members may have to compromise.

Friends and neighbors

A business in the home certainly can change the neighborhood and how the neighbors feel about you. Shipping and deliveries and increased traffic can strain relationships. Be sure your business operations comply with local planning and zoning ordinances, or secure conditional use permits to ensure your right to operate in your home. Communicate your business intentions to your neighbors and work with them to avoid and minimize conflicts.

Financial resources

Many home businesses evolve from activities or hobbies that seem to have good business potential. While still employed, you can "moonlight," then quit your job outside the home and launch the home business full time. Before doing this, take the time to figure out what financial cushion is needed. It is recommended you have savings to cover 3 to 6 month's living expenses. Use the worksheet on the back of this publication, "Cost-of-Living Expenses," to estimate your family's monthly expenses.

Start-up costs

Each business is unique in terms of how much money is needed in the beginning. Consult experts at small business development centers, read trade journals, and make lists of all the initial expenses associated with the type of business you are going to operate. Service businesses using telephone contact need money to buy equipment and supplies (an answering and fax machine, licenses, and insurance). If the business produces a product, you might require storage space, lots of supplies, specialized tools, and equipment to de-liver or mail the product, or get you and the product to trade shows. If your business requires the customer to come to your home, renovations or cosmetic improvements to the home may be necessary.

Depending on the kind of business you plan to start and your management skills, you may need to consult attorneys or accountants; costs to consult or hire professional services is also part of your start-up costs.

Time management

Managing your time for the production and day-to-day operation of the business is probably the biggest challenge facing the home-based business owner. You may be able to perform work in small blocks of time despite interruptions, or you may require large blocks of time with intense concentration. Production, taking orders, and packaging deliveries may be easily integrated into family activities. In contrast, seasonal businesses are controlled by the nature of the task at specific times of the year.

Time management books are abundant for the office environment. Translate those same principles to your home business to maximize your time. Here are a few suggestions:

- Arrange storage areas and work centers so frequently used items are at your fingertips
- Use bits and pieces of time for tasks that can be done in only a few minutes.
- Recognize the time of day when you are most productive and do the most important tasks during your prime time.
- Delegate any tasks you can; identify certain jobs (home or business) that members of your family can handle.
- Reduce clutter; if you allow clutter to build up, you may develop feelings of being "snowed under."
- Prevent a crisis. Don't procrastinate; failure to act may become a problem.
- Don't spread yourself too thin.
- Know when to close the door.

Tell your family, friends, and business acquaintances that even though your business is located in your home, you have set work hours in which you are unavailable. They do not always realize you have time commitments at home similar to theirs at work.

Maintain a separation of the business from your personal life to avoid the overload often associated with the obsession of running the business. Learn to say "no" if your involvement in too many activities becomes a problem. "Because home-based business owners work in the same place where they live, they have a hard time separating personal life from work," says Barbara Brabec, publisher of the *National Home Business Report*. Home business owners work in the office after dinner, or take business calls at all hours. But this can get out of hand. Check yourself regularly and know when to close the door, turn on the answering machine, and not feel guilty about time set aside for you and your family.

For further reading

PNW 127 The Family Council (25 cents)

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Worksheet: Cost-of-living expenses

Regular monthly payments

Rent or mortgage (including property taxes)	$ _____
Cars (including insurance)	_____
Appliances/television	_____
Home improvement loan	_____
Personal loan	_____
Insurance premiums	_____
Miscellaneous	_____
TOTAL	$ _____

Monthly household operating expenses

Telephone	$ _____
Gas and electricity	_____
Water, sewer, and garbage	_____
Other household expenses, repairs, and maintenance	_____
TOTAL	$ _____

Monthly food expenses

Food at home	$ _____
Food away from home	_____
TOTAL	$ _____

Monthly personal expenses

Clothing and clothing care	_____
Drugs	_____
Doctors and dentists	_____
Education	_____
Dues	_____
Gifts and contributions	_____
Newspapers, magazines	_____
Auto upkeep, gas	_____
Spending money, allowances	_____
TOTAL	$ _____

Monthly tax expenses

Federal and state income taxes	$ _____
Other taxes	_____
TOTAL	$ _____

Budget summary

Regular monthly payments	$ _____
Household operating expenses	_____
Food expenses	_____
Personal expenses	_____
Tax expenses	_____
MONTHLY TOTAL	$ _____

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Licenses and legal requirements

L. K. Fox

Many small businesses, including alternative farm enterprises, start a business and *then* go through the steps of researching and meeting local, state, and federal requirements. Getting into business this way is an organic process — you just grow into it. While it may seem easy, there are some real disadvantages to this approach, such as penalties for not meeting health inspection standards, not paying state sales taxes, or not conforming to city/county zoning requirements.

Play it safe! Avoid the pitfalls of being "underground" with your business. Taking care of all your license and permit needs before you actually start doing business will save you time and the frustration of finding things out by accident — while you're purchasing supplies, applying for a loan, or filling out your tax returns.

Local, state, and federal requirements

Regulations concerning the operation of small businesses are made on the local, state, and federal levels; state and local rules apply to businesses within the particular state or locality, and federal regulations apply to businesses that operate across state lines.

A good place to start finding out about local requirements is your county clerk's office, or if you're within the city limits, the city clerk's office. Local regulations vary, but most commonly you'll find you need:

- To meet zoning ordinances that restrict certain commercial activities to certain areas. Guidelines may also regulate business activities, such as the use of advertising signs, lighting, parking, and business use of adjacent buildings and/or your home. Be sure you know about local ordinances before making a major investment in the business.
- To obtain a business license if you operate within the city limits.
- To obtain a building permit if you're going to remodel your existing home or buildings, or erect a new one.
- To visit the county assessor's office for help with commercial and farm vehicle licensing. The county sheriff's office provides chauffeur's and operator's licenses.
- To obtain a certificate of assumed or fictitious name filed with the county clerk's office if you give your business a name different from your own.
- To file articles of co-partnership if your business will be a partnership.
- To file articles of incorporation with the secretary of state if you plan to incorporate.

For information on types of business organization, see University of Idaho College of Agriculture publication CIS 939, *Business Ownership*.

Consumer protection

Federal laws aimed at protecting consumers include the Consumer Credit Protection Act; the Federal Equal Credit Opportunity Act; the Fair Credit Billing Act; the Fair Credit Reporting Act; the Pure Food and Drug Act; the Federal Food, Drug, and Cosmetic Act; the Fair Packaging and Labeling Act; and the Textile Fiber Products Identification Act.

The Consumer Credit Protection Act — This act is commonly called the Truth-in-Lending Act. If you extend credit to your customers, you will be affected by this law. It is intended to ensure a clear explanation of credit terms by requiring that you explain credit terms and interest costs so the consumer will know exactly what the credit will cost. If you offer credit to your customers, you probably should request the free pamphlet, *What You Ought to Know About Truth-In-Lending*, from any federal reserve bank

or from the Board of Governors of the Federal Reserve System, Washington, DC 20551.

The Federal Equal Credit Opportunity Act — This act is designed to ensure consumers are not denied credit for reasons of sex, marital status, age, race, religion, or national origin.

The Fair Credit Billing Act — This act provides consumers with an opportunity to dispute errors in billing statements and requires you to make an effort to correct such errors. It is designed to ensure that a consumer's credit report will confidentially contain only accurate, relevant, and recent information.

The Food and Drug Administration — The FDA is a federal agency within the Department of Health and Human Services. The FDA protects consumers by enforcing laws and regulations to prevent distribution of adulterated or misbranded foods, drugs, medical devices, cosmetics, and veterinary products. You may contact the FDA at 3010 West State Street, Boise, ID 83703, (208) 334-1319, or the regional office in Seattle, WA (206) 442-5300.

The Textile Fiber Products Identification Act — This act requires informative labeling and advertising of textile fiber products. Retailers, wholesalers, and manufacturers share the responsibility for seeing the fiber content of goods they sell is properly labeled and advertised. For example, this federal legislation applies if you advertise clothing or household fabric products in newspapers having interstate commerce, regardless of whether or not the goods are actually marketed across state lines. Therefore, manufacturers and retailers handling textiles have responsibilities under this labeling law.

The Magnuson-Moss Warranty Act — This act deals with product warranties. If you sell products priced above $15.00 and you offer written warranties, you must conform to the provisions of the act and of the FTC rules. The FTC rules regulating the Magnusen-Moss Warranty Act are outlined in *The New FTC Disclosure of Written Consumer Product Warranty Terms and Conditions*, available from the FTC, Washington, DC 20580. The basic provision of the act requires warranties to be written in language that is understandable.

Compliance

What steps should you take to comply with laws protecting consumers? You should evaluate your business practices in terms of consumer rights and develop policies that ensure compliance with consumer protection legislation.

- Your business must not discriminate in granting credit on the basis of race, color, religion, national origin, sex, marital status, age, or because all or part of the person's income comes from public assistance programs.
- Your business must provide a statement of finance charges in a uniform manner to all customers.
- Your business must notify all customers of the annual percentage rate.
- Your business must comply with all legal methods for resolving disputed billings and correcting statements.

Employee protection

Numerous federal regulatory agencies exist to protect and provide for economic security of employees. Some of the more important agencies you should be aware of are the Occupational Safety and Health Act (OSHA), the Fair Labor Standards Act, the Federal Social Security Act of 1935, and the Federal Civil Rights Act.

The Occupational Safety and Health Act — OSHA is one of the most important pieces of legislation protecting employees. It was written to make employers responsible for providing a safe and healthful workplace. OSHA maintains the health and safety of the workplace by establishing standards and conducting inspections of business premises. It is the entrepreneur's responsibility to know the standards and to ensure that facilities and employees comply with the standards. OSHA standards are outlined in the *OSHA Handbook for Small Business*, which can be obtained from the U.S. Department of Labor, Occupational Health and Safety, Federal Building, Room 324, 3050 N. Lakeharbor Lane, Boise, ID 83724, (208) 334-1867.

Many owners of small businesses have voiced concern about OSHA. These owners, some of whom consider the law a necessity, note their heavy workloads leave little time to comply with the many regulations. What can an entrepreneur do to ease the burden? First, be sure your employees are familiar with OSHA and your safety regulations. Second, if you have more than 10 employees, keep a record of work-related injuries and illnesses. Third, become acquainted with OSHA standards and the procedures to be used in performing a workplace inspection.

Fair Labor Standards Act — A second major employee protection concern is the economic status of employees. The Fair Labor Standards Act is intended to protect workers by providing minimum wages, maximum hours, overtime pay, equal pay, record keeping, and child labor limitations. The act requires equal pay for equal work for all employees covered by minimum wage laws. It does not prohibit paying different wages if the difference is based on seniority, quantity of work, or quality of work, but if the jobs require the same skills, efforts, and responsibilities, then an employer cannot pay one employee different wages than another.

In addition to the Fair Labor Standards Act, the Walsh-Healy Act, the Davis-Bacon Act, and other acts establish wages, hours, and working conditions that

apply to firms with government contracts. These other acts may cover your employees, depending on your situation. You can obtain specific information from the U.S. Department of Labor, Wage and Hour Division, Federal Building, Room 395, 3050 N. Lakeharbor Lane, Boise, ID 83724, (208) 334-1029, or from the Portland regional office, (503) 326-3057.

Federal Social Security Act of 1935 — The Social Security Administration (SSA) in the Department of Health and Human Services (HHS) administers the Federal Social Security Act of 1935. The act provides monthly benefits to insured persons and their dependents in the event of retirement, disability, or death. It also provides health insurance (Medicare) to persons 65 and over and to some disabled persons under 65.

Protection from income loss due to industrial accidents and occupational diseases is provided through worker's compensation laws, which provide benefits for injured workers or their dependents, regardless of who is at fault. If a worker is killed or injured on the job, the worker or dependents collect. Payment is made according to a schedule based on the severity of the injury. The worker does not receive benefits if the injury results from a fight he or she started, if the injury was self-inflicted, or if the worker was under the influence of alcohol or drugs. The employer pays the total cost of worker's compensation coverage, which is available through state or private insurance companies. A copy of the *Employer Handbook: Workers Compensation Insurance* is available from the Idaho State Insurance Fund, 317 Main Street, Boise, ID 83720, (208) 334-2370.

Federal Civil Rights Act — Fair employment practices is another broad area of concern regarding the protection of employees. Fair employment practices are established by the Federal Civil Rights Act, which makes it unlawful to discriminate on the basis of race, religion, age, or sex as a condition of employment. In hiring employees, you should be concerned with maintaining the standards established by such laws. You can get into trouble by asking pre-employment interview questions about race, religion, age, and marital status.

Additional laws concerned with fair employment practices include the Equal Pay Act, the Age Discrimination in Employment Act, and the Equal Employment Opportunity Act. You would be wise to familiarize yourself with these laws.

Compliance

What steps can you take to comply with laws protecting employees? Of all the regulations designed to protect employees, those regulations concerned with fair employment practices create the most problems for small business owners. An affirmative action program developed early in the life of a business will eliminate many potential problems. You can follow these basic steps to develop an affirmative action program:

- Develop a written employment policy and affirmative action commitment.
- Designate an individual to direct the affirmative action program.
- Publish your equal employment policy and affirmative action commitment and distribute it within your company and to potential sources of recruitment.
- Review your employment system to identify potential or actual unfair employment practices.
- Develop programs to enhance equal employment and affirmative action goals.

Protection of the environment

In recent years, concern about protecting the environment has resulted in the passing of many antipollution laws. Federal legislation includes the Clean Air Act, the Solid Waste Disposal Act, the Water Quality Act, the Noise Control Act, and the Toxic Substances Control Act.

The Environmental Protection Agency (EPA), 422 West Washington Ave., Boise, ID 83702, (208) 334-1450, is responsible for enforcing laws protecting the quality of our environment. State and local agencies also control similar statutes within their jurisdictions. You should contact the EPA or a local environmental agency concerning any responsibility — in general terms — you may have concerning environmental controls. If you have determined that environmental legislation has a significant effect on your business, you should establish policies for the following: what product lines should be developed; under what conditions the products will be produced; where the business facilities will be located; and how the environment will be impacted.

Licenses and permits

Many enterprises must be licensed by a local, state, or federal agency before opening for business. State governments restrict entry into various professions and types of businesses by requiring licenses. Paying a fee to obtain the license is common, and sometimes an inspection of the business is required. Additional regulations might include yearly inspection of the business by a state government agency or payment of an annual tax. Consult the publication *Starting a Business in Idaho*, available from the Idaho Department of Commerce, 700 West State Street, Boise, ID 83720, (208) 334-2470.

Businesses usually licensed and/or regulated include beekeepers, barber shops and beauty shops, child care centers, cleaning and laundering establishments, dairy product processors and dealers, egg distributors and graders, farm products dealers, finance and lending institutions, florists and nurseries, house-to-house peddlers and solicitors, hotels and motels, general stores, insurance companies, liquor stores,

livestock dealers, pesticide dealers, plant industries, restaurants and food-handling businesses, seed companies, and transportation businesses.

Federal permits or licenses are issued by other government agencies. For example, any enterprise involved in the preparation of meat products (such as sausages and hot dogs) or the production of drug products must obtain the required federal license.

If you plan to hire employees, you must obtain an Employer's Identification Number (EIN) through the Internal Revenue Service (IRS). This number is really a type of license.

States such as Idaho that have sales taxes and "use" taxes usually require businesses to obtain a special permit or license. This license allows the business to give the permit number when purchasing goods for resale instead of paying sales tax. Since the sales tax is a consumer tax, the business is required to collect the tax when selling merchandise to consumers. Business owners must periodically remit the taxes collected. The Application for Idaho Permit Based Taxes (Form TCA) is available from the Idaho State Tax Commission. This will result in the issuing of a Seller's Permit Number or Use Tax Permit Number with directions for the collection and periodic payment of Idaho sales and use taxes. Sales tax laws and regulations in effect on January 1, 1992, allow nontaxable purchases to be made with a tax exemption card.

You can obtain more information on sales and use taxes from pamphlets provided by the Idaho State Tax Commission, 700 West State Street, Boise, ID 83722, (208) 334-3660, or one of five other regional offices in Coeur d'Alene, Lewiston, Twin Falls, Pocatello, and Idaho Falls.

Remember...

Keep in mind rules and laws change. It is always wise to check with the agencies responsible for the most current information on business licensing, permits, and legal obligations.

For further reading

To order copies of this or other University of Idaho College of Agriculture publications, contact the University of Idaho Cooperative Extension System office in your county or write to Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83843-4196 or call (208) 885-7982.

The author — **Linda Kirk Fox**, Extension family economics and management specialist, University of Idaho, Margaret Ritchie School of Home Economics, Moscow. The author gratefully acknowledges Ray Prigge, director, District IV Extension, University of Idaho, for permission to adapt *Minding Your Business at Home, Dealing with Legal Issues.*

Information sources

Federal phone numbers

Federal Employer ID Number SS4	(800) 829-1040
Employers Quarterly Return 941	(800) 829-1040
Annual Federal Unemployment 940	(800) 829-1040
Your Business Tax Kit	(800) 829-1040
Personal and Business Tax Forms	(800) 829-1040
Health, Safety Requirements	(208) 334-1867
Wage and Hour Regulations	(208) 334-1029
Bureau of Alcohol, Tobacco & Firearms	(208) 334-1983
Immigration and Naturalization	(208) 334-1821
U.S. Bureau of Land Management	(208) 334-1414

State phone numbers

Idaho Bureau of Occupational Licenses	(208) 334-3233
Idaho Department of Agriculture	(208) 334-3240
Idaho Department of Commerce	(208) 334-2470
Idaho Department of Employment	(208) 334-6318
Idaho Department of Fish and Game	(208) 334-3700
Idaho Department of Health and Welfare, Division of Family and Children's Service	(208) 334-5700
Idaho Department of Health and Welfare, Division of Environmental Quality	(208) 334-5839
Idaho Department of Lands	(208) 334-3280
Idaho Department of Revenue and Taxation	(208) 334-7660
Idaho Secretary of State	(208) 334-2300
Idaho Department of Water Resources	(208) 334-4440

State addresses

Idaho Department of Commerce
700 West State Street
Boise, ID 83720

For employer registration, income tax:
Idaho Department of Revenue and Taxation
700 West State Street
Boise, ID 83722
(or one of five other regional offices in Coeur d'Alene, Lewiston, Twin Falls, Pocatello, and Idaho Falls)

For registration for unemployment:
Idaho Department of Employment
Employee Accounts Bureau
317 Main Street
Boise, ID 83735

For registration of assumed name, partnership, incorporation, or registration of a trademark:
Secretary of the State of Idaho
Statehouse, Room 203
Boise, ID 83720

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Cost accounting – a practical approach

B. B. Davis, J. F. Guenthner, and L. D. Makus

The profitability of your business depends on your ability to control costs and returns. Cost accounting is necessary to make intelligent management decisions. However, precise cost information is not always available. As enterprises are added to the business, cost information becomes more complicated and difficult to obtain. A system must be developed and implemented to provide information.

This system, called "enterprise cost accounting," assigns costs to appropriate business enterprises, such as hay or berries. A separate record of costs must be kept for each enterprise in the business. This can be as simple as including an additional ledger column for each enterprise or as complex as having a separate ledger for each enterprise.

Enterprise cost accounting reveals whether enterprises are making or losing money. Without this vital information, you may keep unprofitable enterprises that reduce your income year after year.

A cost framework

Fixed and variable costs

A basic framework for cost analysis separates variable and fixed costs. Variable costs are incurred during production and are influenced by the volume of production. They include fertilizer, fuel, seed, repairs, and pesticides. Fixed costs are those that do not vary with production and will be incurred even if there is no production. Fixed costs include taxes, depreciation, insurance and interest on investment in land, buildings, and machinery. Total cost of production is the sum of variable and fixed costs, or:

Total variable cost + total fixed cost = total cost

Costs per acre, per bushel, (or per any unit of output) are called per-unit costs and are calculated as:

Total variable cost ÷ units of production = variable cost per unit

Total fixed cost ÷ units of production = fixed cost per unit

Total cost ÷ units of production = total cost per unit

Posted and allocated costs

A "posted" cost is any cost that can be easily identified and assigned to an enterprise at the time the cost is incurred or paid. For example, the cost of seed can be posted to the appropriate crop as the bill is paid.

An "allocated" cost is one that cannot be easily assigned to a particular enterprise. Property tax, fuel, repairs, insurance, and depreciation are examples of allocated costs. A procedure is needed to divide these costs among the various enterprises.

You must decide how much detail you want. At first, it may be wise to post only the large costs and those you can control. For example, labor may be a large cost in some businesses. A time card system could be developed to post labor costs to enterprises for this type of business. Other businesses, where labor is a minor cost, may choose to allocate labor cost on the basis of acreage or some other appropriate measure.

Fertilizer, pesticides, and seed are major costs on a grain farm that should be posted directly to the different grain crops. Machinery expenses are more difficult to assign. For similar crops like grain, many growers allocate machinery costs on an acreage basis. If the crops are quite different, machinery costs can be allocated according to hours of machinery use or gross income for each enterprise.

With the addition of these two new cost concepts, our enterprise cost framework becomes:

Posted variable costs + allocated variable costs = total variable costs

Posted fixed costs + allocated fixed costs = total fixed costs

Total variable costs + total fixed costs = total cost

Designing the system

Practical cost accounting begins before the production season. First, you should list the types of costs you expect to incur. For new enterprises, a cost of production study or enterprise budget for the new crop or a similar crop are useful guides. These budgets are available from most county Extension offices. For existing enterprises, your experience is a valuable tool.

Next, identify the costs that have a big impact on profits. The costs that you can control should get extra attention. The costs that you cannot control (such as taxes) and the small costs can be allocated. At the same time, identify those costs that can clearly be posted to enterprises.

An example

Suppose that you operate a business called New Enterprises and raise 1 acre of berries and 10 acres of hay. During the course of the year you have the following expenses:

Time period	Type of expense	Amount ($)
January	Office expense	25
	Farm insurance	500
	Farm taxes	600
February	Office expense	25
	Shipping containers (berries)	1,000
	Labor (berries)	500
	Baling twine	175
March	Office expense	25
	Pruning labor (berries)	450
	Herbicide (berries)	150
April	Fertilizer (hay)	500
	Tractor fuel	1,000
	Fertilizer (berries)	500
May	Weeding labor (berries)	275
	Crop insurance (hay)	125
	Repair cooling shed (berries)	160
	Truck fuel	950
June	Tractor repairs	500
	Berry picking	1,750
	Custom swathing	2,000
	Truck license	350
July	Haying labor	500
	Pruning labor (berries)	350
All year	Depreciation	1,000

Allocation percentages

A percentage of some of the above costs should be allocated to enterprises. Allocation methods and percentages may differ among cost categories. For example, consider the hours of use and stress on equipment by crop when assigning percentages for items such as fuel, maintenance, and repairs. In contrast, you might use contribution to gross income for allocating such items as office costs and taxes.

New Enterprises has decided to use the following allocation percentages:

Item	Hay (%)	Berries (%)
Fuel	75	25
Repair	60	40
Overhead, licenses	40	60
Depreciation	60	40

A cost accounting system

Table 1 is a cost accounting system for New Enterprises. Note that the columns are divided into variable and fixed costs. "Allocate" is another heading. The two columns on the right are enterprise categories for posted costs. More complex operations would include more cost categories.

A quick check after each month, or other bookkeeping period, will help find posting errors. For example, add the first column to find total costs. Next, sum each of the columns except the "Enterprise accts." columns. The totals should match (note "Check total 1" in Table 1). If they don't match, identify the error before proceeding. As a second check, add the "Allocate" columns to the "Enterprise accts." columns. This sum should match the total cost column ("Check total 2").

To complete the process, those expenses not directly posted to one of the enterprises are allocated. Table 2 shows the assignment of costs to hay and berries for New Enterprises. The allocation percentage for each enterprise category was determined earlier. The first expense category, fuel, is allocated by multiplying the appropriate percentage for hay (75 percent) times the $1,950 fuel expense, or $1,462.50. Similarly, 25 percent times $1,950, or $487.50, is the amount of fuel expense allocated to the berry enterprise. The procedure is the same for repairs and overhead.

Next, allocate depreciation and other noncash costs to determine the total cost of production. Finally, total cost per unit can be calculated by dividing the number of units produced by each enterprise. Dividing the $6,368.50 total cost of production for the hay crop by 70 tons of hay produced gives a cost per ton of $90.98.

Management applications

Once costs of production and revenue are determined, you can answer questions and make decisions. First, is the enterprise profitable? If not, can it be made profitable? If not, should it be dropped or continued with the understanding that it will be subsidized by other activities? If an enterprise shows a small profit or loss, you should consider a more detailed cost accounting. Analysis of equipment

Table 1. An example of a simplified cost accounting system for New Enterprises, January through July.

		Variable costs ($)					Fixed ($)		
					Allocate			Enterprise accts. ($)	
Date/Item	Amount ($)	Misc.	Fertilizer and pesticide	Labor	Fuel	Repair	Overhead	Hay	Berries
1/31									
Office expense	25	—	—	—	—	—	25	—	—
Farm insurance	500	—	—	—	—	—	500	—	—
Farm taxes	600	—	—	—	—	—	600	—	—
2/28									
Office expense	25	—	—	—	—	—	25	—	—
Berry containers	1,000	1,000	—	—	—	—	—	—	1,000
Berry labor	500	—		500	—	—	—	—	500
Baling twine	175	175	—	—	—	—	—	175	—
3/31									
Office expense	25	—	—	—	—	—	25	—	—
Berry labor	450	—	—	450	—	—	—	—	450
Berry herbicide	150	—	150	—	—	—	—	—	150
4/30									
Hay fertilizer	500	—	500	—	—	—	—	500	—
Tractor fuel	1,000	—	—	—	1,000	—	—	—	—
Berry fertilizer	500	—	500	—	—	—	—	—	500
5/31									
Berry labor	275	—	—	275	—	—	—	—	275
Hay crop insurance	125	125	—	—	—	—	—	125	
Truck repair	160	—	—	—	—	160	—	—	—
Truck fuel	950	—	—	—	950	—	—	—	
6/30									
Tractor repair	500	—	—	—	—	500	—	—	—
Berry labor	1,750	—	—	1,750	—	—	—	—	1,750
Custom swathing	2,000	2,000	—	—	—	—	—	2,000	—
Truck license	350	—	—	—	—	—	350	—	
7/31									
Haying labor	500	—	—	500	—	—	—	500	—
Berry labor	350	—	—	350	—	—	—	—	350
Totals	12,410	3,300	1,150	3,825	1,950	660	1,525	3,300	4,975
Check total 1	12,410			12,410					
Check total 2	12,410						12,410		

Table 2. An example of assigning allocated costs to hay and berries for New Enterprises.

	Allocate ($)			Enterprise accts. ($)	
Notes	Fuel	Repair	Overhead	Hay	Berries
Posted[1]	1,950.00	666.00	1,525.00	3,300.00	4,975.00
Fuel	75% hay 25% berry			1,462.50	487.50
Repairs		60% hay 40% berry		396.00	264.00
Overhead			40% hay 60% berry	610.00	915.00
Total cash costs				5,768.50	6,641.50
Depreciation			1,000.00	—	—
			60% hay 40% berry	600.00 —	— 400.00
Total cost of production				6,368.50	7,041.50
Cost per ton (70 tons produced)				90.98	—
Cost per pound (6,000 pounds produced)				—	1.17

[1]Posted costs are from Table 1.

hours, fuel used, and overhead expenses can help make a better decision.

If no production or marketing changes can be made to improve profits, you should consider dropping the enterprise. In the short run (normally 1 or 2 years), an enterprise should cover its variable costs to continue production. If variable costs are not covered (price is lower than per-unit variable costs), the enterprise should be dropped. If the enterprise is covering variable costs and contributing something to fixed costs (price is higher than per-unit variable costs but less than per-unit total costs), the enterprise can be continued on a temporary basis.

Some enterprises are kept because of indirect benefits. For example, some crops are grown at a loss to provide a necessary rotation for the major cash crop. The loss associated with the rotation crop should be considered a cost of producing the cash crop. Some enterprises are kept because they create enjoyment or a learning experience for the family. If so, understanding costs can help you decide if the enterprise's contribution can justify the cost.

Summary

Cost accounting is an important management tool that can be done in several ways and with varying degrees of complexity. Your system should reflect the complexity of your operation and your understanding of accounting methods. The key is to recognize that some costs can be posted to enterprises but others must be allocated. The allocation procedure should have some underlying reason for assigning costs to the enterprises. From a practical point of view, maintain only the amount of detail necessary for the decision or analysis you want to make.

For further reading

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Understanding budgets and the budgeting process

R. L. Smathers

As a business owner, the primary problem you face is a limited supply of resources — land, labor, and capital available to accomplish your goals. Allocating these scarce resources entails making many decisions. Specific decisions might include: What should I grow this year? How much fertilizer should I apply? Should I replace my worn-out tractor? Should I expand by purchasing or renting additional land? The answers to these questions could influence the profitability of your operation for years to come.

Regardless of the scope of the issue being considered, you must sit down with pencil and paper and analyze the question. Budgeting does just that; budgeting coordinates resources, production, and expenditures. It is implementing a business on paper before any resources are committed to production; it helps you predict the consequences of an adjustment in your operation before ever making the adjustment. While farm records serve as a record of the past, budgets are an anticipation of the future. After budgets are done, they become a standard for monitoring what actually happens in the operation.

The usefulness of a budget depends on the reliability of the information used to create the budget. Unrealistic estimates of prices, yields, or input quantities would lessen the accuracy of the budget and could possibly lead to a faulty decision. Sound management decisions can be made using budgets, but care must be exercised in using only reliable information.

Types of budgets

There are four types of budgets that will be discussed here, each playing a different role in decision making. The budgets most commonly used by agricultural producers are whole farm, partial, cash flow, and enterprise.

Whole farm budget

This budget is a summary of expected income, expenses, and profit for the entire farm; it measures the physical and financial aspects of the whole farm. Its uses include comparing profitability of several farm plans; determining income potential, debt repayment capacity and value of the farm or ranch; providing lenders and others with a detailed farm plan for the next year; and helping the operator analyze major adjustments in the farm operation.

Partial budget

In contrast to the whole farm budget, the partial budget measures only returns and expenses that result from an adjustment in the farm plan. Those aspects of the farm plan not affected by the adjustment are left alone in the partial budget analysis. Ignoring the constant factors in the overall operation of your business simplifies the analysis greatly. You might use the partial budget to help decide what crop to grow on a small amount of acreage. The partial budget could also help you decide whether or not to buy or custom-hire machinery for harvest. The partial budget is far quicker and easier to construct than a whole farm budget because it measures only a change in the farm plan.

Cash flow budget

This budget is a projection of cash receipts and expenses for the total business spread over some future time period, usually 12 months. The purpose of this budget is to determine if available cash and expected receipts will be sufficient to meet projected disbursements. If projected disbursements exceed cash available, then borrowed funds will be necessary to meet these future demands. The cash flow budget is needed in negotiating a line of operating credit with your banker.

Enterprise budget

The last budget, the enterprise budget, is an estimation of all revenues and expenses for a farm or ranch enterprise during one cycle of production. The enterprise budget is usually developed on a per-acre or per-head basis to allow comparisons among alternative enterprises. This budget can be used to compare the profitability of alternative enterprises, assist in development of a marketing plan, negotiate with the sources of credit, and plan adjustments to the operation. The enterprise budget also provides base information to construct the whole farm, partial and cash flow budgets. The enterprise budget will be discussed in greater detail in the following sections because of its importance in creating other budgets.

Developing an enterprise budget

The University of Idaho Cooperative Extension System publishes enterprise budgets for the major crops and livestock produced in Idaho. These budgets are based on production and input data collected from Idaho farmers and ranchers and information from Extension agents, Extension specialists, and others familiar with commodity production.

The apple budget in Table 1, one of many crop budgets published by the University of Idaho College of Agriculture, shows how an enterprise budget should look. Costs in these budgets are categorized as fixed and variable costs. Variable costs are those items that occur annually and vary with different levels of production, such as fertilizer, chemicals, seed, and hired labor. Fixed costs, often referred to as ownership costs, remain the same regardless of the level of production. Once machinery and buildings are acquired, the costs associated with these items are incurred even if production stops. Machinery and buildings depreciate, taxes and insurance are still due, and interest on capital borrowed to purchase these assets must still be paid. These costs normally do not vary in one year or less.

Preparing an enterprise budget can be a formidable task because of the amount of information needed. A good set of farm records can make the task much easier. If records are not available, enterprise budgets can be obtained from most county Extension offices and modified to fit your situation. Costs of production will differ from one operation to another, so existing budgets should be used only as guidelines.

If you develop an enterprise budget from scratch, it is important to sit down and "pencil out" a schedule of what happens from the beginning of the production process to the end. It's very important to note the timing and number of operations, quantities of inputs applied, and estimates of machinery use devoted to the enterprise. Do this for each enterprise.

Variable costs

After a schedule or outline has been developed, it's time to quantify and categorize the costs. To estimate a variable cost, simply multiply the projected quantity of each variable input (fertilizer, chemicals, seed, etc.) by the anticipated price per unit. For example, Table 1 shows that 30 pounds of nitrogen will be applied to each acre of apples during the production year. This translates into $7.50 per acre (30 lb x $.25/lb).

Other variable costs include fuel, lubricants, and repair costs on machinery. These costs are not traditionally divided among crop enterprises, but are totalled at the end of the year for income tax reasons. These year-end totals can be allocated among enterprises. The trick is to estimate what percentage of your total machinery use is required for each crop enterprise. For example, if your tractor is used 400 hours each year and 100 of those hours pertain to the apple enterprise, then 25 percent of the tractor fuel, repairs, and lube costs should be allocated to the apple enterprise. For tillage equipment, hours of annual use may not be available, so times over the field would be another way of allocating use. If a piece of equipment is used solely for one enterprise, then 100 percent of the costs should be charged to that enterprise.

If you do not have a set of farm records containing repair and fuel costs, ask your local Extension agent for a copy of *The Costs of Owning and Operating Farm Machinery in the Pacific Northwest*, PNW 346, (or write Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83843-4196). Some states also have worksheets or computer programs designed to help estimate these costs. Idaho has the *Enterprise Budget Worksheet* program and *Machine Cost* for MS/PC DOS operating systems.

Another important variable cost is interest on operating capital. An easy way to approximate this is to sum all variable cash expenses for one production period. The total, assuming this is the amount to be borrowed, is divided by the proportion of the year the funds are borrowed, then multiplied by the prevailing interest rate. Dividing total capital required by two would imply that the capital to cover cash variable costs is borrowed, or averaged, for one half of the year. Dividing by four would imply that the capital is borrowed for one-fourth of the year.

Be sure all hired labor is included under variable costs. Even though some of the labor is owner-supplied and doesn't involve a direct cash outlay, it should still be accounted for in the budgeting process.

Fixed costs

Fixed or ownership costs cover depreciation, interest on investment, taxes, and insurance expenses on capital items such as machinery, livestock, buildings, and land. Machinery and buildings lose value due to age, use, and obsolescence, and this loss is known as

depreciation. Annual depreciationcan be calculated by using the following equation:

(Purchase price - salvage value) ÷ useful life (yrs).

Annual interest on machinery investment takes into account the interest paid on borrowed capital or the opportunity cost of the owner's money invested in machinery. Opportunity cost can be defined as the value of an input (in this case, capital) in its most profitable alternative use. It can be calculated by multiplying the interest rate for investment capital by the average investment in a piece of machinery. Average investment can be calculated using the following equation:

(Purchase price + salvage value) ÷ 2.

For property taxes, use the statement from the assessor or estimate using the tax rate multiplied by the estimated value of the machinery. Insurance costs can be obtained from your agent or calculated by multiplying the insurance rate (typically 0.4 to 1.5 percent, although some items can be much higher) times the market value of the machinery or equipment.

Fixed costs (depreciation, interest, taxes, and insurance) should be estimated for all machinery and buildings in use in your business, then totaled and allocated to the appropriate enterprises. For example, if 20 percent of the tractor's annual use is devoted to the apple enterprise, and annual fixed costs (depreciation, interest, taxes, and insurance) on the tractor are $2,000 per year, then $400 (0.2 x $2,000) should be allocated to the apple enterprise. Once fixed costs for all capital items have been allocated to appropriate enterprises in this way, then fixed costs per enterprise can be summed and divided by the number of acres in the enterprise to determine total fixed costs per acre as shown in Table 1.

An appropriate land charge should also be included as a fixed cost in the budget. If you rent the land you farm, then it would be appropriate to include the cost of the lease in your budget. If you own the land, then a charge should be included for interest on the capital invested in the land and for property taxes. The interest rate should reflect the rate that could be earned in the next best alternative. If the best alternative is putting the capital in a savings account, then the interest rate that could be earned on savings should be multiplied by the value of the land to estimate an interest cost. In this case, where land is owned, the interest charge is an opportunity cost.

Establishment costs

During the years it takes to establish a perennial crop, there are usually few or no receipts to offset your initial start-up costs. Therefore, it is necessary to prorate or amortize those costs over the full production years. In the apple budget (Table 1), it was assumed full production lasts for 25 years. The initial cost of establishing the apple crop and interest on those costs over the establishment years ($6,000 per acre) could be viewed as a loan to be paid back over the 25 production years. In this case, the annual installment is $661 per year ($6,000 amortized at 10 percent for 25 years) and is listed as a fixed cost in the budget.

Budget interpretations

The enterprise budget for apples in Table 1 shows a return above all costs of $164.90 per acre. Although this return is positive, it may not be the maximum profit possible from an acre of apples. This enterprise budget simply represents one point on the production curve. There are many different combinations of inputs that will produce a given enterprise, some more or less profitable than others. The point is that each combination reflects a point on the production curve, not necessarily the most profitable point.

The $164.90 per acre net return shown in Table 1 is often referred to as profit and can be compared to the estimated profit per acre for alternative crops. It can also be used to select the most profitable crops and/or crop combinations to grow.

A zero profit for an enterprise does not imply that the enterprise is a losing proposition. It must not be forgotten that a properly constructed budget like the one in Table 1 accounts for all production costs, including opportunity costs. Note that charges are included for all purchased variable inputs, all labor whether hired or owner-supplied, all capital whether borrowed or owner-supplied, and land whether rented or owned. Charges on all owner-supplied labor, capital, and land are opportunity costs.

The point to be made here is that even given a zero net return or profit on an enterprise, the operator would still be earning a return on his equity invested in land, labor, and capital to produce that enterprise. The only costs not included in the apple budget that are difficult to quantify are risk and management. Therefore, the net return or profit of $164.90 per acre in the apple budget should be considered a return to risk and management.

Using the enterprise budget

The enterprise budget is an invaluable tool that provides a wealth of information to you as a business manager. Its uses, as mentioned earlier, include negotiating with the banker for capital financing, determining enterprise profitability, monitoring actual costs of production, and providing information for a marketing plan.

Marketing is an area many farmers pay far too little attention to. Market risks are a result of the variability and unpredictability of the prices farmers receive for their products and pay for their production inputs. Fluctuating supply and demand and market conditions result in price variations. The questions you

should be asking yourself are: What selling price per unit and/or yield do I need for my commodity to at least cover my costs of production? And what is the probability of obtaining that price or yield? Breakeven and sensitivity analysis are two steps that can be used to address these questions.

Breakeven analysis

Breakeven analysis is a process managers use to estimate price or yield levels necessary to recover costs of production. Calculating breakeven price or yield levels requires access to reliable enterprise budgets such as the apple budget in Table 1.

Breakeven price (Bep) can be calculated as follows:

Bep = total costs ÷ expected yield.

The following results were computed by substituting the appropriate information from the apple budget in Table 1 into the preceding breakeven formula.

Bep = $3,235.10 ÷ 40 bins/acre = $80.88.

The results show, with an expected yield of 40 bins per acre, that it would take a selling price of $80.88 per bin to exactly pay for the costs of producing the apples. The price necessary to cover variable costs (Bepv) can also be calculated simply by substituting total variable costs in place of total costs in the formula.

Bepv = $1,998.10 ÷ 40 bins/acre = $49.95.

It would take a selling price of $49.95 per bin to exactly pay for the variable costs of producing the apples. Inserting fixed costs into the equation reveals a breakeven price of $30.93 per bin to cover these costs.

Breakeven information is helpful in making marketing and production decisions. If a contract is offered to the apple grower at the beginning of the year for $90.00 per bin, he could expect a net return of $9.12 per bin or $364.80 per acre. This return, no matter how high, is only as reliable as the cost and yield estimates presented in the enterprise budget. If these estimates are based on current input prices and historic yield data, then the contract proposal would appear to be a profitable offer. If an offer of $78.00 per bin is made, the grower would realize a net loss of -$2.88 per bin or -$115.20 per acre.

Breakeven yields can also be estimated. Yield analysis is especially useful if a crop is contracted at a certain price, and you want to determine the quantity you need to produce to cover your costs. Breakeven quantity (Beq) can be calculated as follows:

Beq = total costs ÷ contract price.

Breakeven quantity to cover variable and fixed costs can be determined simply by substituting variable or fixed costs for total costs in the equation.

Sensitivity analysis

Neither commodity prices nor yields seldom stay the same from month to month and year to year; input prices also vary. What impact does variation in yield and price have on the profitability of an enterprise?

One way to measure the sensitivity of an enterprise to price and yield variations is to take your enterprise budget and calculate returns above costs at different prices and yields. Use the price and yields you think are likely, then look at some price and yield combinations that are both hopeful and pessimistic. Table 2 shows how sensitive net returns for apples are to different price and yield combinations.

Since both yield and output prices in an enterprise budget are estimated rather than actual values, breakeven and sensitivity analysis can aid you in your farm decision-making process. By exploring breakeven prices and various price/quantity combinations, you form your own expectations about the probability of obtaining a price and yield combination that would just cover your total costs of production.

Conclusion

Without the support of budgets, decision making is a guessing game. Whole farm, partial, cash flow, and enterprise budgets all play a distinct role in sound management.

For further reading

MS 101	1991-92 Northern Idaho Crop Enterprise Budgets (35 cents)
MS 102	1991-92 Southwestern Idaho Crop Enterprise Budgets (35 cents)
MS 103	1991-92 Southcentral Idaho Crop Enterprise Budgets (35 cents)
MS 104	1991-92 Southeastern Idaho Crop Enterprise Budgets (35 cents)
PNW 346	Costs of Owning and Operating Farm Machinery in the Pacific Northwest ($2.75)

To order copies of this or the above University of Idaho College of Agriculture publications, contact the University of Idaho Cooperative Extension System office in your county or write to Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83843-4196 or call (208) 882-7982. Idaho residents add 5 percent sales tax.

The author — **Robert L. Smathers**, research associate, University of Idaho Department of Agricultural Economics and Rural Sociology, Moscow.

Table 1. 1990 estimated costs of producing red delicious apples in southwestern Idaho.

	Unit	Price or cost/unit ($)	Quantity per acre	Value or cost/acre ($)	Your value
Gross receipts from production	bins	85.00	40.00	3,400.00	
Total receipts				3,400.00	
Variable costs					
Tree replacement	tree	7.00	1.00	7.00	
Fertilizer:					
Nitrogen	lb	.25	30.00	7.50	
Phosphorus	lb	.19	20.00	3.80	
Potash	lb	.13	20.00	2.60	
Zinc	lb	1.00	8.00	8.00	
Other nutrients	acre	22.00	1.00	22.00	
Hive rental	hive	10.00	1.00	10.00	
Insecticides, fungicides, etc.	acre	136.57	1.00	136.57	
Water assessment	acre	47.50	1.00	47.50	
Strip maintenance (herbicide)	acre	18.00	1.00	18.00	
Bin rental	acre	26.68	1.00	26.68	
Rodent control	acre	5.00	1.00	5.00	
Labor:					
Pruning and training labor	hr	5.00	62.22	311.10	
Hand thinning labor	hr	5.00	54.92	274.60	
Irrigation labor	hr	5.00	14.42	72.10	
Harvest labor	hr	5.00	110.23	551.15	
Other labor	hr	5.00	11.68	58.40	
Crop insurance	acre	138.50	1.00	138.50	
Machinery	acre	140.85	1.00	140.85	
Tractor repair	acre	14.37	1.00	14.37	
Tractor/fuel/lube	acre	59.39	1.00	59.39	
Overhead	acre	50.00	1.00	50.00	
Interest on operating capital		275.00	.12	33.00	
Total variable costs				1,998.10	
Fixed costs					
Cash costs					
Machinery and equipment insurance	acre	7.44	1.00	7.44	
Property insurance, etc.	acre	32.00	1.00	32.00	
Personal property and real estate taxes	acre	18.00	1.00	18.00	
Noncash costs					
Machinery and equipment depreciation, interest, housing	acre	259.85	1.00	259.85	
Pickups, trucks depreciation, interest, housing	acre	108.70	1.00	108.70	
Land interest charge	acre	150.00	1.00	150.00	
Prorated establishment costs[1]	acre	661.00	1.00	661.00	
Total fixed costs				1,237.00	
Total costs				3,235.10	
Returns to risk and management (gross receipts – total costs)				164.90	
Breakeven price per bin, total variable cost: $49.95					
Breakeven price per bin, total cost: $80.88					

[1]Establishment costs are amortized at 10% for 25 years.

Table 2. Sensitivity analysis.

Yield bins/acre	Price of apples $/bin		
	76.50	85.00	93.50
	Per acre return over variable costs ($)		
34	602.89	891.89	1,180.89
40	1,061.89	1,401.89	1,741.89
46	1,520.89	1,911.89	2,302.89
	Per acre return over all costs		
34	-634.10	-345.10	-56.10
40	-175.10	164.90	504.90
46	283.90	674.90	1,065.90

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Identifying domestic markets
Indirect marketing of produce

J. F. Guenthner

There are two ways to sell your produce in the fresh market. One way is to sell directly to consumers through roadside stands, farmers' markets or pick-your-own operations. The direct method is fully described in a 1992 University of Idaho College of Agriculture publication, *Marketing Your Produce Directly to Consumers* (see "For further reading"). Another way is to sell in indirect market channels where growers and consumers don't meet. The purpose of this publication is to explain the indirect method.

Obstacles to indirect marketing

Traditional markets have long been established for many agricultural commodities. Livestock producers can take their animals to livestock auctions, grain growers can sell to local grain elevators, and sugarbeet growers can sign a contract with a sugar processor. But it's not that easy for people who grow horticultural crops, especially in regions where the crops are not traditionally grown.

One of the differences between fresh produce and major commodity markets is the perishability of the product. Grain can be stored for long periods and livestock can be kept and fed, but when raspberries are ripe they must be marketed fast or they will spoil.

Perishability causes another difference — price volatility. Prices for grains are dampened because of grain in storage, but with fresh fruits and vegetables, the storage life is much shorter. Crops such as potatoes, onions, and apples are stored for extended periods, but even these crops are not carried over into the next crop year like grain.

Crops such as lettuce and berries cannot be stored at all. Markets for these crops can easily be flooded if many areas are in full harvest at the same time. On the other hand, prices can rise to very profitable levels if only a few areas are harvesting or if weather causes harvest delay.

Another difference between fresh produce and major commodities comes from what must be done to prepare the food for the consumer. Wheat must be processed into bakery products and livestock into meat products, but fruit can literally be eaten off the vine. It is as simple as that if you run a pick-your-own operation. However, if you don't market directly, you must make packing and shipping arrangements to enter various indirect market channels.

Packing and shipping

While produce in the fresh market is not "processed," it must still be prepared for consumers. Preparations include washing, sorting, grading, and packaging. Some product lines also include drying, cooling, and waxing. The firms that do these things are called packers, and their facilities are usually called packing sheds.

Some growers are also packers, but the expensive equipment required for packing some fruits and vegetables puts packing beyond the reach of many individual growers. As a result, packing and marketing cooperatives are common in some fruit and vegetable growing regions. Since fresh fruit and vegetable prices are volatile, cooperatives need to have clearly written rules regarding the pricing of members' products. For example, a member would not want all of the product sold when prices are low.

If you do not have your own packing shed or belong to a cooperative, you have two other options: sell to a packer or hire a packer. When you sell to a packer, you are usually quoted a flat price for a given quantity or a variable price based on quality. It is the

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packer who bears the risk of price declines before the final product is sold. On the other hand, the packer, rather than you, benefits from price increases.

There are packers who are willing to shift the price risks and opportunities to you. They will pack your product for a fee, usually a certain amount per pound, hundredweight, or bushel. Under this arrangement the packer's interest is volume rather than selling for top prices.

After the product is packed it must be shipped to the next part of the marketing chain. This involves assembling loads and selling them. The people who do this are called shippers. Shippers are usually located where the product is grown. Most packers are also shippers, but some growers who pack still rely on a shipper to handle the assembling and selling functions. Some growers do all three functions — grow, pack, and ship.

Shippers have several market outlets as described below. Even if you are not involved in selling the packed product, you should still be aware of where shippers are sending your product.

Market outlets

Wholesalers

Wholesale produce terminal markets are located in large cities — near consumers rather than growers. The two largest, Los Angeles and New York City, make up 16 percent of the total wholesale market for produce in the fresh market.

Terminal markets can be owned by the state, city, or private companies. The purpose of terminal markets is to provide a distribution facility. Shippers send truckloads of produce from the growing areas to the terminal. The people or firms at the terminal markets are called receivers. They are also known as wholesalers, distributors, or jobbers (small lot buyers).

Wholesalers usually buy truckloads of fresh fruits and vegetables, unload them at the terminal markets, then make up new, mixed loads for sale to retailers, institutional buyers, or other wholesalers. In the past many shipments were sent to terminal markets unpriced and auctioned or sold after arrival. The current trend is for shippers to sell to wholesalers before transport to the terminal.

Retailers

The next logical step is for wholesalers to sell to retailers, and this has been the traditional pattern in the industry. Not long ago there were many "mom-and-pop" grocery stores that could not handle large loads of fruits, vegetables, or other food. Wholesalers performed a vital function for them by delivering small, mixed loads of the products needed by these small grocers.

The retail industry has changed. Now there are large retail chains that can handle large quantities of produce. Many even have their own distribution systems. Some of these retailers have little need for the traditional wholesalers; many fresh fruit and vegetable shippers sell directly to large retailers.

Individual retail stores close to production areas can also be important markets. Local branches of some grocery chains are often willing to buy local produce. The keys to breaking into these markets are to provide consistent high quality for long periods at a reasonable cost. Retail buyers need a good reason to buy local rather than through their chain's distribution system. Advantages you can provide as a local shipper include less time in transit and higher quality (fresher) produce.

Institutional buyers

Americans are eating more and more meals away from home. In the early 1990s they were spending nearly half of their food dollars for meals away from home. If the trend continues it will soon be more than half. These meals are eaten not only in restaurants, but also in schools, hospitals, military bases, hotels, prisons, and nursing homes. This institutional market is also known as the food service market.

The smaller institutional buyers deal with wholesalers. As with retailers, there is an increasing number of large institutional buyers; some of the largest are the fast food chains. These large firms are also increasingly buying direct from shippers rather than from wholesalers.

Brokers

Brokers negotiate sales between shippers and other receivers. They provide a valuable service to shippers who don't have the experience, contacts, or expertise to sell all of their product to wholesalers, retailers, or food service buyers. They usually serve as a buyer representative in the growing/shipping region. Brokers have traditionally purchased in the buyer's name and made arrangements for terms of sale and transportation and charged a brokerage fee for their services.

Like other parts of the produce marketing chain, the brokerage business is changing. A growing trend is for brokers to buy directly from the shippers and take title to the product. These brokers, in effect, replace a brokerage fee with the potential for earning a profit on the difference between buying and selling prices. Other brokers operate like agents — they handle sales for a group of shippers.

Market information

Fresh produce production is seasonal. You need to know when competing regions are going to market their crops. Demand is also seasonal. For example, pumpkin demand is high at Halloween and cranberry demand is high at Thanksgiving. Seasonality together with perishability contribute to volatile prices. In order to reduce risk of low prices and expand opportunities for high prices, you need reliable market information.

Fortunately, unbiased market information is available from public sources. The Federal State Market News Service (FSMNS) provides terminal market reports and shipping-point reports for fruits, vegetables, and ornamentals. The terminal market reports cover truck and rail shipments to the largest cities. The shipping-point reports cover shipper prices for the major growing areas. Grower prices are also reported in some shipping-point reports.

FSMNS market information is available in daily reports, weekly reports, and annual summaries. Reports can be sent by mail or FAX to subscribers. Some offices also provide radio reports and daily telephone recordings. The information is also available electronically from several computer database services.

The headquarters of FSMNS in Washington, D.C., may be contacted for additional information about what reports are currently available. The address is U.S. Department of Agriculture, Agricultural Marketing Service, Fruit and Vegetable Division, Market News Branch, P.O. Box 96456, Washington, D.C. 20090-6456, telephone (202) 447-2745.

There is also a weekly publication that serves the fresh fruit and vegetable marketing industry — *The Packer*. Subscriptions are available from Vance Publishing Corporation, 7950 College Blvd., Overland Park, Kansas 66210-1855, telephone (913) 451-2200.

Information on individual firms involved in fresh fruit and vegetable marketing is available in *The Red Book* and *The Blue Book*. They are both subscription services that provide confidential information on firms to subscribers. The information includes ratings on the firm's financial health, trading practices, business methods, and paying practices. Listings are sorted by location and type of service, which includes shippers, receivers, and transportation firms. Shippers and receivers usually look in one of the books before doing business with a new customer. Since the books have comprehensive lists of firms in the industry, they can also be used to solicit new business.

More information can be obtained from *The Red Book*, P. O. Box 2939, Shawnee Mission, Kansas 66201, telephone (913) 451-2200 and *The Blue Book*, Produce Reporter Company, 315 West Wesley Street, Wheaton, Illinois 60187, telephone (312) 668-3500.

For further reading

CIS 741 Marketing Your Produce Directly to Consumers ($1.00)

To order copies of this or other University of Idaho College of Agriculture publications, contact the University of Idaho Cooperative Extension System office in your county or write to Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83844-2240 or call (208) 885-7982.

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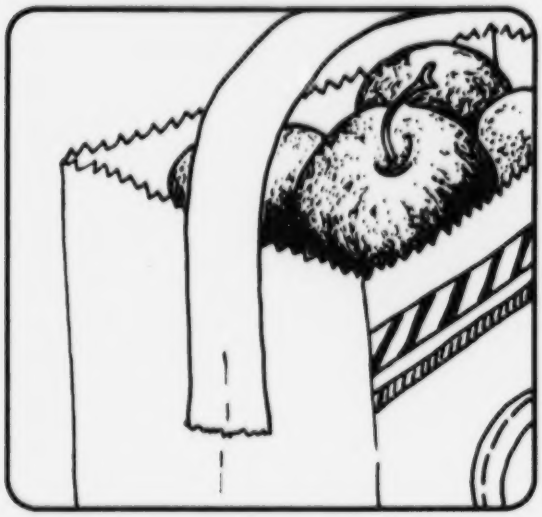
Marketing your produce directly to consumers

V. L. Parker-Clark



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Cooperative Extension System

EXT 741

Marketing your produce directly to consumers

V. J. Parker-Clark

In order to have a successful direct farm-to-consumer business, you must have a product desired by the public, develop an effective marketing plan, and make use of promotional techniques. Basically, through careful planning and operation, you must do everything you can to attract and keep customers. As a part of your decision-making process about marketing produce directly, you should answer the following questions:

- Is there a *demand* for your product?
- What are your marketing *alternatives*?
- Is there an *advantage* in selling direct?
- Are there *legal restrictions* on direct marketing your product?
- What are your *expectations* of direct marketing?
- Is your *location* satisfactory?

Why do you want a farm market?

Your reasons for wanting to establish a direct farm-to-consumer outlet probably include a desire for increased financial returns from farm production. If you own a small farm or truck garden, you may find that direct marketing means additional income even if you have insufficient volume or selection to attract processors and commercial buyers.

Besides additional income, several other factors may make direct marketing attractive to you. Direct marketing gives you the opportunity to own your own business and determine your own product mix. If you have the ability to raise specialty crops such as flowers, snow peas, ornamental corn, etc., direct marketing allows you to provide products during special seasons or to special groups. If you enjoy dealing one-on-one with people — visiting with them about how you produce your crops, why your products are of the highest quality — then you will enjoy a direct farm-to-consumer marketing operation.

Your marketing needs will depend on the variety and volume of products you grow and the marketing channels available to you. Having a garden with excess produce is substantially different from having a large volume of produce that must be sold rapidly.

Will it sell?

Before you decide how to sell a product, you need to answer the question, "Will it sell?" You must know who will buy your produce, how to sell to these buyers, how much they are likely to purchase, and what price they are likely to pay: you must understand your market. This requires you to do some marketing research, which will provide information to help you project future trends and plan a marketing program. But first, you must clearly define the products and services you intend to provide.

Define your product/service

To develop a clear, usable definition, think about your product from the perspective of a potential buyer. Write the definition by summarizing the product features, service aspects, marketing season, and benefits to the buyer or user. As you learn more about the market, you may modify your product/service and, therefore, the product definition.

Product features — Describe the product varieties or types, its range of size and quality, product mix, and other characteristics. Example: "Corn — multicolored, white, and yellow; extra sweet, baby, ornamental, and popcorn."

Service features — Describe packaging, processing, method of delivery, information, or other services that

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accompany the product. Example: "Popcorn will be offered on the ear as well as in 1 pound and 5 pound packages. Ornamental corn will be sold husked. Customer requests for quantity will be honored. Directions for using ornamental corn in decorations will be available, and demonstrations will be given each Saturday at the market."

Marketing season — Determine the period of time for which you will offer the product and/or service. Example: "Corn available July-October only."

Benefits to customers — Write a brief statement to answer the question, "Why should the consumer buy from me?" Example: "Benefits to the customer include a fresh, locally grown product with no chemical residue, demonstrations of the uses of ornamental corn, and recipes for baby corn."

Capsule description — Formulate the essential concept of your enterprise in a short but complete statement. Include each characteristic above, but don't exceed 50 words. Example: "We offer many varieties of corn at bargain prices in three package sizes or in bulk. Additionally, we provide demonstrations and information on the uses of ornamental corn and recipes for baby corn."

Market research

Once you have clearly defined your product, learn as much as possible about your market, the competition, and consumer trends. To estimate your potential profit, you need to project potential sales and prices. To begin with, visit a local produce store or direct market outlet and note their prices and quality. Can you beat what is currently available to consumers in your area?

Then gather existing data from libraries, government offices, chambers of commerce, universities, Cooperative Extension offices, trade magazines, and computer databases. While it may be tedious, "secondary research" is often the easiest and least expensive way to obtain market information.

Secondary research

Demographics — Population characteristics, such as the number of people in a certain age group or average family size in a geographic area, may be useful. The number of people in the nearest city with incomes over $20,000 can be obtained from your state's department of commerce, division of economic development, or your region's economic development council office. For example, Panhandle Area Council (PAC) in Hayden Lake, Idaho, publishes a report each year that includes this information.

Current population figures can be obtained from town and city offices, libraries, local transportation departments, planning boards, school district offices, and other local agencies. National demographics are available from the Bureau of the Census and other public sources, as are regional and local demographics that describe income, age distribution, and other basic characteristics.

Information on very specific characteristics, such as the number of people in your area who process food at home (canning and freezing) may be difficult to obtain. While searching, mention your needs to resource people; sometimes special reports are prepared on unique topics.

Consumption — The number of pounds of garlic consumed per person per year since 1968 or the annual number of tourists that visit U-pick operations, for example, may be useful. The commodities for which this data exists are those which have been marketed for a long time (apples, grapes, potatoes, sweet corn), which generate many dollars or involve many acres or farmers (corn, wheat), and those covered by federal programs (wheat, honey).

Be cautious in your interpretation of data. Information for new products, such as cut flowers or garlic, may be out of date even if they are only a few years old. Also, consumption data describe national trends and may be less useful on the local level. USDA-ERS Statistical Bulletin no. 825, *Food Consumption Price and Expenditures, 1968-89* (May 1991), may contain useful information. Check your local library or write USDA-ERS, 1301 New York Ave. N.W., Washington, DC 20005-4789.

Primary research

Observation — This includes counting the number of products, people, or events in a way that is relevant to your enterprise. Disadvantages include the labor required and the limited amount of information obtained from each observation.

Surveys — Surveys to determine people's needs and buying patterns may be written and distributed or taken over the telephone. Written surveys take more time to prepare but yield more information. They are usually mailed or distributed as shopping bag stuffers and handouts. Telephone surveys can yield much information quickly and, if limited to local calling area, are inexpensive. However, the interviewer must be persistent and pleasant, and respondents may tolerate only a small number of questions.

Evaluating your results

Once you have defined your product/service, know the demographics of your market area and the average amount consumed of the product(s) you want to sell, and have talked with people in your area about their needs and purchasing patterns, you should be able to answer the following questions:

- *What* am I selling?
- What *prices* will I likely receive for my product?
- *Who* will buy or use this product?
- *How much* of this product will people buy?
- *What volume* am I likely to sell in the market?
- How *strong* is my competition in the market?
- What are *future* trends for this product or service?
- How can I best *market* this product?

If you are not completely confident about your marketing projections, don't be discouraged. There is no way to predict the future with certainty. However, by gathering and understanding as much information as possible, you will learn if your product or service is in demand and the best options for marketing it directly — farmers' market, roadside stand, U-pick operation, etc. If your market research shows excess supply or that the trend is one of declining consumption and prices, do not pursue the enterprise.

How to market it?

If your market research shows there is a niche for your product, your next step is to decide how best to market it. Selecting a method depends on you, the farm location, the volume of products you plan to sell, and other factors that will be discussed below. Major direct-marketing options include roadside stands, roadside markets, U-pick operations, and farmers' markets. Other direct-marketing options include honor or self-serve selling, peddling, rent-a-tree or plot arrangements, subscription selling, gift baskets, and mail-order sales. Let's look at each of these options.

Roadside stand

A roadside stand is usually located on your farm to sell produce during harvest. You also may want to sell neighbors' products to offer a wider variety. A successful roadside stand should have adequate access, parking, and knowledgeable sales personnel.

Advantages of a roadside stand include the opportunity to perform chores during slack periods and lower transportation costs. A roadside stand can expand as consumer demand increases. Your roadside stand could grow into a large, successful roadside market as you gain experience and accumulate capital. A roadside stand allows you considerable flexibility with respect to size, season, and method of operation.

Roadside market

In a roadside market operation, you grow a portion of the produce sold and buy additional products for resale. Your market could operate year round by relying on wholesalers for produce during the winter season. Some roadside markets sell products other than produce, but the operation is generally identified by its rural atmosphere and "home-grown" products. You should try to locate your market on your property to clearly indicate its direct association with your farm. This type of market is popular on the East Coast.

The primary advantages of the roadside market are the on-farm location and the diversity of products made possible by purchasing from wholesalers. Year-round employment is provided, and the additional income may eventually eliminate the need for off-farm employment.

Major disadvantages of a roadside market are the needs for a good location and substantial capital for facilities and inventory. Zoning regulations may require your market to be in a commercial zone rather than an agricultural zone.

U-pick operation

In a U-pick operation the consumer comes to your farm, does the harvesting, pays for the produce harvested, and transports it home. Consumer harvesting is best suited for crops that have a distinctive indicator of ripeness, such as color or size, or for crops that can be harvested all at once.

A U-pick operation requires far less harvest labor, handling, packaging, shipping, and storage than other marketing alternatives. You receive immediate payment upon harvest with no deductions for shipping, handling, spoilage, or risk of price change. Consumers enjoy selecting fully ripe fresh products and tend to buy in quantity for home canning and freezing. They also assign some recreational value to their U-pick experiences.

Disadvantages include the need for a large parking area, possible crop damage, getting enough pickers to harvest the entire crop, increased risk of accident and liability, and having to tolerate inexperienced pickers.

Farmers' market

Whatever the name — open-air market, curb market, community produce market, or farmers' retail market — the primary function of this type of market is to bring together two or more producers for the purpose of selling locally–grown produce to local consumers.

Market facilities range from a large permanent structure with individual stalls to a parking lot where vendors sell from the back of pickup trucks. The facilities may be owned and operated by individuals, corporations, or cooperatives, or they may be owned by a city or a municipality. Most farmers' markets function under a formal set of rules, guidelines, or by-

laws agreed to by the sellers. Your state's department of agriculture may have a listing of farmers' markets within the state.

A farmers' market offers advantages to both producers and consumers. For you and other producers, collective selling attracts more customers. The product mix and number of sellers also offers consumers a greater variety of produce that is usually fresher and less expensive than in local stores. To some, the farmers' market provides an opportunity to special-order produce directly from producers in quantities for home canning. Other advantages include the opportunity for low-income families and older citizens who have limited mobility to purchase fresh fruits and vegetables.

Disadvantages of a farmers' market include the fact that you must absorb the costs of transportation and of selling your products. Time spent selling means time away from the farm. You also may find that limited market days may not provide a large enough sales volume to cover the added marketing costs. Also, most markets are not open year round. A final disadvantage may be the difficulty of finding good market managers at an affordable salary level.

Honor selling

When your sales volume does not warrant full-time sales people and you trust your customers, you may want to use this option. With honor or self-serve selling, you stock your sales room or outlets with available products, and consumers serve themselves, leaving payment in a cash box. Self-serve selling results in reduced sales labor requirements, but increases the risk of pilferage and theft.

Peddling

This is a direct-marketing option in which you sell and deliver to homes, retail stores, institutions, and restaurants. You might also sell off the back of your truck or door-to-door where permissible. The advantages of this type of direct marketing include low overhead cost, easy entry into the peddling business when a product surplus exists, and easy exit from business when product supply is short. Since you are transporting the product to the customer, your farm location is not as critical. Peddling disadvantages might include legal restrictions, required licensing, difficulty in identifying customers, and a possible fly-by-night image.

Rent-a-tree

In this option, also called "plot arrangements," consumers make a contract with the grower for the yield of a certain tree or row in the field. Generally, you agree to do all the cultural operations to produce the product and supply the equipment for harvesting. The renters have the use of the tree or plot for the duration of the contract and do the harvesting.

The primary advantage of the rent-a-tree arrangement is reduced harvest labor expense. However, disadvantages include increased effort in identifying individual trees or areas and in modifying cultural practices to satisfy customers.

Subscription selling

In this type of marketing, consumers sign up for a season's worth of produce. They subscribe for a certain amount of produce each week (1 bag, 2 bags, etc.) and indicate what their favorites are. They agree to take produce that may not be their favorite when quantities of those crops require you to distribute them. You deliver to the customers' homes or places of work and provide recipes for unusual vegetables and fruits as well as for "the same old vegetables."

This type of marketing is becoming popular in populated areas, or where families are too busy to garden or do not have space. An advantage of this type of marketing is that your farm does not need to be in a "good" location, nor do you need a stand or building in which to sell your produce.

Gift baskets, mail-order sales

These methods are popular options with products that can be packaged attractively and have limited perishability (apples, herbs, holly, and dried flowers). Gift baskets and mail-order sales are not as location-dependent. If you can participate in a group catalog or work with others to produce gift baskets, your selling season may be extended and your customer base increased.

Location, site selection, and facilities

A major factor in your decision on how to direct-market your product is location. You can still market your product by other methods if you do not have a good location, but for roadside stands, U-pick operations, and farmers' markets, location is important. The ideal location will:

- Be on a well-traveled road near population centers.
- Be clearly visible to potential customers.
- Be located away from sharp curves, hill crests, and high-speed highways.
- Be on the right-hand side of a road leading into town.
- Have adequate parking for customers.
- Have access to necessary utilities.
- Be near other direct-marketing enterprises.

Direct-sales operations have been very successful when located within a few miles of a city, town, or resort area. As "bedroom areas" for the larger communities spring up, the opportunity to establish direct-marketing facilities nearby are greatly enhanced.

A substantial portion of customers stop at roadside stands out of impulse because the stand or products appeal to them. An adequate flow of traffic by your stand is especially important if you think impulse buying will be an important part of sales. Before you decide on a roadside stand, you should figure your cost of production, price your product, and determine how many sales per day you would need to cover those costs plus overhead. One way to do this is to determine the average number of cars that travel past your proposed market location each day (do this as a part of your market research) and divide that into the figure you calculated to cover your costs. That will give you a ball park figure of how much each car load of people would have to spend in a day just to keep your market door open.

If you lack adequate traffic by your farm, you may want to consider an off-farm location for your stand or market. In evaluating off-farm sites, you should be aware of additional expense in renting, transporting products, staffing, security, etc.

Offering an "experience" along with the market or U-pick will draw customers. You may consider having a petting zoo, Octoberfest, hay rides, picnic areas, camping facilities, or other activities and services that will draw customers to your farm market.

Site selection

There are two major considerations in site selection: the convenience of the customer and the convenience of the operator. For the convenience of the customer, your facility should be easily visible from the highway. USDA studies have shown visibility is influenced by physical characteristics such as a long, level stretch of road, the outside of a broad curve, or near the top of a long sloping hill. The site should offer easy exit from and return to traffic. Consumers do not like to turn abruptly from the flow of traffic into a driveway leading to a roadside stand or market, so many consumers will pass your direct-sales operation if the turnoff is the least bit dangerous or the turn difficult to make. To eliminate this danger, consider constructing a wide shoulder turn off lane. Before changing the entrances to your property, however, you should check the right-of-way or other regulations with the proper state or local agencies.

The best site from your standpoint as the operator may be near your home. If your operation is close to your house, you need not be at the facility continuously, and the location may be economical from a security and sales standpoint. Costs may be reduced by extending the utilities from the home to the roadside stand or control point of a U-pick operation. However, be sure to evaluate your family's feelings about increased traffic and commotion near your home.

Facilities

Most direct-farm marketers start out small and expand as customers and volume increase. If you have a barn, shed, or packing house, you might be able to convert it to a roadside stand for less money than it would cost to build a new facility. Also, unless great care is taken, a new building may destroy the "on-the-farm" atmosphere important in attracting customers.

Design considerations include customer convenience and safety, ease of operation and labor requirements, construction cost, all-weather operation, appearance (the farm image), ease in altering or relocating displays, low-cost expansion later, storage requirements including refrigeration, water supply and sanitary facilities, and preparation area.

The size and shape of the building should be in direct proportion to your planned business volume and the permanency of the enterprise. You should anticipate lighting, water, drains, and refrigeration needs, and evaluate whether to install them initially or at a later date. Facility expansion can be very expensive.

Your stand or market should include a sales room, a preparation area, and a walk-in refrigeration area where you can hold foods at the proper temperatures.

Display equipment

Many types of display equipment are on the market: dry racks, wet produce racks, ice produce racks, and mechanically refrigerated produce cases. Display equipment does not have to be elaborate, but should be adequate to do the job. It should have shelving that can be easily cleaned, washed, and maintained.

Traffic flow within your market

You should give considerable thought to traffic flow *within* your market. Arrange displays, shelves, and racks so they guide consumers automatically on a predetermined path. This path should pass nearly all the items displayed for sale (this may increase impulse buying). Traffic flow also makes it easier to direct the customers to a central check-out station and scale.

One of the best places to study traffic flow is inside your local supermarket. Spend an afternoon or two

watching how people are guided by the position of displays and the location of products. Put what you learn to work in your market.

If you have a U-pick operation, control of the product and customers is also important. To accomplish an even and complete harvest, you should lay out, stake, or rope off fields into blocks or rows. Do not permit customers to pick helter skelter in the fields except in a salvage-type operation. Visit successful U-pick operations to see how customers are guided through the fields and to the check-out area.

Parking

Mark the parking area clearly, and if space is available, mark individual parking places with logs, poles, lime, or rope. If a parking design is established, most customers will park accordingly.

Parking is critical if you have a roadside stand. You should project your parking needs based on your expected business. The following general rules may be helpful:

- One parking space should be allocated for each $100 worth of annual business anticipated.
- About 15 parking spaces should be allowed for each 100 cars expected daily.
- About 4 square feet of parking space should be allowed for each square foot of market size.
- Parallel parking spaces, if used, should be 22 feet long by 10 feet wide.
- Angle parking should be angled at 90°, 60°, or 45°.
- Spaces should be marked on the ground.

Many problems arise from improperly prepared and surfaced parking lots. Good drainage will prevent pot holes, ruts, and corduroyed surfaces. Dust is often a problem and should be controlled. If your parking lot is dusty, your market will be dusty. Customers do not like to breathe, see, or eat dust.

Merchandising strategies

Through merchandising, you can increase customer satisfaction. Merchandising includes many aspects of direct-market selling such as product selection, processing and packaging, pricing, display, inventory control, advertising, sanitation, customer service, and employee appearance and behavior. An easy way to explain merchandising is to define it as the art of selling or the "market dance." The intent of merchandising should be to sell available products as profitably as possible, to build clientele satisfaction, and to encourage repeat sales. Accomplishment of this goal cannot be left to chance.

As you begin to develop a merchandising plan, you must remember merchandising means supplying what the customer wants. Be creative and imaginative. In direct marketing, customers expect above all to find high quality and freshness, but they also expect the market to be clean and attractive. Summarized below are merchandising principles that generally apply to all direct marketing.

Your products

Freshness and quality are more important than having a variety of products. However, you can often increase sales by having companion products (of good quality) like dill and pickling cucumbers, carrots and peas, etc. If you have only one product for sale, such as apples, you might consider offering more than one variety, or alternatives in processing or packaging such as cider or apples by the pound, peck, or bushel. You might also sell some cut up and packaged as ready-to-eat or dried.

Handling and storage

Because fresh and flavorful products are your main draw, proper handling and storage are important parts of your mechandising plan. Protect perishables from the sun, overheating, and drying out. Avoid bumping and bruising produce (customers can be cautioned about this, too).

Display and packaging

Displaying and packaging products attractively can increase sales with little extra effort or cost. Display items in bulk quantities when possible because this gives customers the impression of a good selection and adequate supply. Using wooden baskets, crates, or barrels gives that country-fresh look.

If you provide carry-out bags for bulk items, make sure they are stamped with your market's trademark or logo. You may also want to sell canvas shopping bags stamped with your logo for those shoppers who do not want to use paper or plastic.

Packages and containers should fit your customers. Through a market survey, you will know if your customers are families who like ready-to-cook veggies, or two-person households who love to cook from scratch. Know who your customers are and provide packaging that tells them you recognize who they are and that you want to meet their needs.

Use display tables and racks whenever possible. Products displayed on the floor are difficult for customers to inspect, and it takes about four times as many products displayed at floor level to give the same visual impact as a display at elbow level.

Most customers hesitate to show ignorance of what an item is or how it might be prepared, so for an unusual item include in the display a descriptive card, a recipe folder, or a picture of a prepared dish featuring it. These helpful hints may tempt customers into trying something new and different. Strive to keep everything neat, clean, and tidy, including the floors and salespeople. These efforts will result in more impulse buying by customers who enjoy your market.

Pricing

Price tags are a must. Many customers like to comparison shop. By displaying prices, you will help them enjoy shopping at your market, and you will save time for all concerned. You can sell the same items at different prices if you separate the products according to quality factors (such as color, variety, size, shape. blemishes, minor cuts or bruises) and display them on different tables. Sometimes a basket, box, bag, or a package priced as a unit will return the same price per pound, but will appear to be a better buy from the consumers' standpoint.

Customer service

Poor customer relations will destroy your business quicker than anything else. People do not have to trade at your stand. They will go where they feel appreciated; where the salespeople put them ahead of everything else. Try to learn your regular customers' names, addresses, sizes of families, names of family members, likes and dislikes, social life, how frequently they entertain, if they like to try new recipes and new vegetables, and if they like to be sold on a product or to shop only from a shopping list. If you employ salespeople, insist they also know your customers.

You can show your appreciation for your customers by occasionally rewarding them with an extra apple, flower, or vegetable. A baker's dozen is a small-town market touch, a nice way of saying "thanks" for continued patronage. Practice any courtesy that will make a lasting impression and make your customers feel appreciated.

In merchandising, you should always think ahead. Keep customers informed as to what items are arriving within a few days, next week, and even next month. For example, you can clue customers in on when the first sweet corn will be ready. Post a schedule of items expected in the stand, U-pick operation, or farmers' market. Also include these schedules in newspaper ads.

Promotional strategies

Selling directly to consumers means you must let them know about your business and its location. Having the best produce, the best service, and the best price is pointless if you have no customers. Advertising and promotion are legitimate business expenses. Common advertising and promotional techniques include word-of-mouth; signs; newspaper, radio and television ads; direct mail; and booths at fairs and exhibits.

Word-of-mouth

Compared to other forms of advertising, word-of-mouth is the least expensive, but the most difficult to use. This type of advertising has to be earned. While satisfied customers will sing your praises, dissatisfied ones will shout their criticism. Word-of-mouth will bring customers to you if you show interest in your customers and their families and consistently offer courteous service, high quality produce, and reasonable prices. Early-in-the-season customers should leave your market feeling good so they share their positive experiences with friends.

Signs

Signs, if properly made and used, can be one of the most effective advertising and promotional techniques. A sign is usually the first indication motorists have that your market is just ahead. In less than 10 seconds, these silent aids must attract attention, identify your market, tell the location, and announce what is for sale. Therefore, signs should be large, easy to read, and depict a farm-fresh image. Messages on blackboards or scrawled in crayon on cardboard are difficult to read and give the impression of a second-rate, unprofessional market. Your market's farm-fresh image may be clouded by association with such things as soft drink or cigarette ads.

A sign that merely reads "fruits and vegetables" will not attract as many customers as one that lists a variety of products. Skillful use of symbols (an apple or ear of corn) may convey ideas better than words. Include your market logo on the signs. Do not put too much information on your road sign since a traveling motorist will be unable to read all of it.

The color of letters strongly affects the distance from which your sign can be read. Choose bottle green on white, scarlet red on white, black on white, and navy blue on white. Select colors to contrast pleasingly with the background against which the sign will be viewed and to distinguish it from other distractions.

There are a variety of national, state, county, and local regulations regarding the placement and type of signs you may use. Because of this, before erecting a sign on a building, piece of property, along a highway, at an intersection, or on a county road, inquire at local offices for information about sign ordinances.

Newspapers

Newspapers offer three possibilities for advertising and promotion: the news story (free publicity), the display ad, and the classified ad. Each of these is somewhat different in method, but each achieves the same results — informing customers who you are, your market's location, items for sale, and business hours.

Newspaper advertising can prove effective if you use it continually throughout the season. Use display ads on a regular basis to announce new items, an oversupply of one commodity, or a short supply of another item. Include your logo so consumers will recognize and be conditioned to look for your ad.

Buyer's guide and maps

Various directories, guides, and maps can be made, but essentially they all contain the same type of information. A good buyer's guide will include the name and address of each direct marketer in the area, the location and directions for getting to the markets, a listing of commodities handled, the season of availability, the methods of sale, and the hours of operation. In addition to written descriptions, the guide may include a pictorial map, a county road map, or a sketch of the highways, roads, or streets on which the various farm operations are located.

Direct mail

Mailing cards, flyers, or letters to a long list of people is time consuming and expensive, so if you use direct mail, make sure the list is up-to-date. You can collect names by asking customers to register in a guest book or fill out a card, or you can compile a list of names and addresses from customers' checks.

You may want to send cards at the start of the season to tell established customers when you are opening for business, or you may use printed cards to announce the arrival of particular commodities as they come into season. You can also use direct mail for public relations purposes by remembering your customers on Christmas, birthdays, and other special occasions. Sometimes a simple "thank you" will create a lasting impression on your customers. The personal touch is invaluable.

Radio

Although radio time is expensive, radio spots are within the budget of most direct marketers. You must, however, carefully plan and execute radio spots so they reach the intended audience. Radio advertising sales people can help you prepare the script, determine the length of the spot (usually 10, 15, or 30 seconds), and select the appropriate times of day to reach the greatest number of listeners.

Television

Television is usually more expensive than radio, but it may reach a much larger audience. Therefore, before eliminating this advertising medium as a possibility, you should talk with station personnel to determine if television advertising will bring the results you want for the money you are able to spend.

Point-of-sale materials

Point-of-sale or point-of-purchase materials are another means of advertising and promotion. Many customers save recipes and other suggestions for using seasonal produce. These materials will help sell your products in the future by helping customers find new uses for familiar produce or by showing them how to use unfamiliar products.

Fairs, exhibits, display booths

These provide another way of putting the product before the public, this is another opportunity to collect names and addresses for your mailing list. You may want to team up with other direct marketers, especially if you participate in a farmers' market association or a buyers' guide. Also, if the exhibit, fair, or display booth is scheduled when your market is open for business, operating both the home place and the exhibit booth might be a good idea.

For further reading

Three excellent resources for more in-depth information on marketing are *Farming Alternatives, A Guide to Evaluating the Feasibility of New Farm-Based Enterprises*, NRAES-32; *Produce Handling for Direct Marketing*, NRAES-51; and *Facilities for Roadside Markets*, NRAES-52, all available from the Northeast Regional Agricultural Engineering Service, Cornell University, 152 Riley-Robb Hall, Ithaca, New York 14853.

The Farmer-to-Consumer Marketing series, PNW 201-206, published by Washington State University, are also excellent publications. 25¢ each.

To order copies contact the University of Idaho Cooperative Extension System office in your county or write to Bulletin Office, Cooperative Extension, Cooper Publications Building, Washington State University, Pullman.

Many states have a direct-marketing association. In 1992 Idaho did not have such an association, but a specialty foods association does exist as well as numerous farmers' market associations. There is also a national farmers' direct-marketing association that meets annually. Contact the Idaho Department of Agriculture, Marketing Division, 2270 Old Penitentiary Road, Boise, Idaho 83712, for more information on these associations.

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Marketing internationally

L. D. Makus and B. B. Davis

The traditional definition of a successful marketing program focuses on two concepts: determining the needs of your selected market and serving that market better than your competitors. If you are currently serving a domestic market successfully, marketing internationally may be a logical extension of your current business activities. In fact, marketing your product or service internationally may offer growth and profit opportunities that don't exist in the domestic market. The export market offers a more diverse market base, which has advantages other than just increasing your market size. Market diversity can extend a product's life cycle, help cushion revenue losses associated with an economic downturn in the domestic economy, and encourage you to constantly improve your marketing skills.

The purpose of this publication is to introduce you to some of the aspects of marketing internationally. If you are really interested in expanding into the international market, you will need more information. A list of additional readings is provided at the end of this publication.

Marketing internationally offers some challenges you should keep in mind. International monetary transactions involve foreign currencies and require an understanding of certain terms and documentation. Your potential customers are going to be different. They may act and think in ways you find unusual, speak a different language, and conduct business using rules you find puzzling. Remember you are the outsider. Good marketing suggests you should be the one making cultural and language adjustments. Taking the time to learn something about the culture and business practices of this new group of customers should be an expected investment.

As with exploring any new marketing opportunity, don't begin with preconceptions about what products or services have market potential in certain countries. Begin the search with an open mind – U.S. companies have developed export markets for chopsticks in Japan and oil in Saudi Arabia! Your best opportunity may lie in a new export market nobody else has been innovative enough to discover.

Should I do it or not?

The first step in marketing internationally is to explore whether or not you should enter the export market. You don't have to be a large firm selling a high-tech product or service to be a successful exporter. The key is a willingness to put forth the necessary effort.

However, exporting is not for everyone. If your company is not succeeding in the domestic market, the export market is probably not going to be your salvation. If you cannot afford to commit time and capital as a long-term investment in market expansion, marketing internationally is not the right decision. Marketing internationally is a long-term investment, which means there is a short-term cost.

Much like any major change in your business, the decision to market internationally should be supported with a well-thought-out plan. An export plan is not only useful in making the initial decision, but also is an excellent management tool if the decision is made to begin exporting. *A Basic Guide to Exporting* published by the U.S. Department of Commerce provides a good outline for an export plan.

Which market(s)?

The strategy of selecting a few countries — or even one initially — with the eventual goal of a strong entry is probably the most effective. This is especially true for a smaller company with limited international marketing experience. Start with a general overview of several countries using broad-based information which is easy to obtain. The *Ernst and Young Resource Guide to Global Markets 1992* is an excellent source for general information. Obtain more specific information (which is more expensive) as you narrow the field down to the country (or group of countries) you plan to target.

Which country (or group of countries) you initially select depends on several factors. The nature of your product probably plays the most significant role. The first step is to find out where your product fits in the numerical classification systems used for international trade. The Standard Industrial Classification (SIC), Standard International Trade Classification (SITC), and

Harmonized System (HS) codes are used to classify products. Your regional Small Business Administration (SBA) office or your state Department of Commerce is the most efficient way to obtain your product's classification numbers. *The World is Your Market* edited by William Delphos has a list of SBA offices and phone numbers.

Statistical data on U.S. exports, imports for other countries, total world trade, and tariffs or quotas are likely based on one of the numbering systems mentioned above. Therefore, determining where your product fits in each of these numbering systems can assist you in locating potential markets, measuring potential market size, and identifying important trade barriers.

Other factors to consider in selecting potential export markets are geographic proximity and cultural similarity. Canada is the largest export market for the U.S. because it is close, has similar business practices, and is primarily English speaking. For a firm just entering the export market on a small scale, Canada may be the most logical country to analyze in more detail.

Additional considerations include trade barriers, political climate, distribution infrastructure, market size, and the level of competition. In sum, a lot of information is needed to identify a market that fits your particular product, experience, and resources. The Delphos book has several appendices with comprehensive lists of public and private information sources. If your product is related to agriculture, the U.S. Department of Agriculture's Foreign Agricultural Service puts out an excellent set of materials called the *Agxport Action Kit* that includes information sources.

How to enter the market(s)

There are several ways to enter your selected markets. Producing the product domestically and then exporting directly (establishing your own sales organization) or indirectly (selling through a third party) are the most likely initially. Other options include licensing (an agreement with a foreign firm to produce and sell the product in their country), joint ventures (joint ownership of a company to produce and/or sell the product in the foreign country), or direct investment (direct ownership of foreign manufacturing/distribution facilities). Since indirect and direct exporting are the most common alternatives for a beginning exporter, both are briefly discussed here.

Indirect exporting involves working through companies that specialize in exporting for others. Such companies are organized as export merchants (firms that buy your product and resell it in a foreign market); export agents (firms that negotiate with foreign buyers on your behalf and are paid a commission on any sales); export management companies (firms that totally manage your export activities for a fee); and cooperatives (firms owned by a group of producers that provide marketing services for the group).

All of these firm types provide international marketing expertise and charge for their services. *Profitable Exporting: A Complete Guide to Marketing Your Products Abroad* has excellent chapters on indirect exporting and developing agents or distributors overseas.

Indirect sales requires a smaller investment in capital, time, and personnel in comparison to direct sales. Thus, for someone new to international marketing, using an indirect sales approach is an excellent way to gain valuable international marketing experience.

Direct exporting involves setting up your own marketing/distribution operation for the export market. Direct exporting can be accomplished through an export department or division in your company; overseas sales branch (gives the firm a greater presence in the target market); traveling export sales representatives (home-based); and foreign distributors or agents (firms located abroad that market your product or represent your interests).

Direct exporting will involve more up-front costs, foreign travel, direct contact with foreign buyers, and risk. However, it will also provide greater control over your international marketing efforts and can be more profitable than indirect marketing. For most firms, direct marketing is a reasonable long-term goal as your expertise in international marketing develops.

How to modify my current program

How much you need to change your existing marketing program depends on whether you use an indirect or direct method for entering the market. The indirect approach may mean someone else is responsible for your international program, yet you should still be familiar with the program that is being used. If you use a direct exporting approach, the amount of change in your existing marketing program will vary by product type and targeted markets. In almost every situation, some changes will be required.

Product

Your product (which includes the package) will probably need some modification for the export market. Shipping products overseas with no modification may be viewed as a surplus disposal program and may not succeed over the long term. Some products can be introduced into foreign markets without modification (cameras, battery-operated consumer electronics, machine tools, for example), but other products need major modification or are specifically designed and developed for the international market to begin with.

Even if the product doesn't need modification, the package will have to be specifically designed. Brand names don't always translate appropriately, information must be printed in the customer's language, and packages may need metric units of measure.

Promotion

Products that depend heavily on promotion in the U.S. probably need similar support overseas. Much like your product and its package, modification in advertising and promotion should be expected.

It is possible to maintain your domestic theme in your foreign message, but be sure the message is translated by a native speaker who is also familiar with the target market. Mistakes in translation can be major, leaving a lasting negative or humorous impression that is expensive to change. Color schemes are also a consideration. Colors suggest particular images in all cultures, and this varies from country to country. Acquire enough understanding of the culture to avoid words and colors that attach an inappropriate image to your product.

What media to use also varies by country. Some countries don't have commercial television or radio time, or restrict commercial access to these media. Thus, what is considered the most effective media in the U.S. may be unavailable or ineffective in overseas markets. Use of consumer promotional mechanisms will also vary. Coupons or contests involving games of chance, for example, are not allowed in some countries. If advertising and promotion are going to be an important part of your overseas marketing program, get input from individuals or groups within the target market.

Government agencies and trade associations sponsor trade shows in foreign countries. Trade shows offer a relatively inexpensive way to promote your product in a targeted international market. The Idaho Department of Commerce should have information on upcoming trade shows for specific countries.

Place (distribution)

International marketing uses three distribution channels. The first is in the U.S. and involves shipping from the production location to an export facility. Special packaging and documentation are required, so this operation will be different than your domestic distribution activities.

The second is distribution between nations. This involves different organizations, documentation, and transportation modes than your domestic distribution activities. Services of a freight forwarder are often necessary, at least initially. *A Guide to International Shipping* by Donald E. Ewert provides a thorough discussion of international shipping and a methodology for evaluating and selecting a freight forwarder.

The third is distribution within the country you are exporting to. Many foreign countries have distribution channels much different than the United States. Most are more complex, involving a larger number of firms and a higher total markup.

In export marketing the principles of efficient distribution still apply, but don't assume the distribution system you currently use is comparable to what exists in the export market. Different methods of packing, documentation, shipping modes, and a more complex internal distribution system are typically associated with entering an overseas market.

Price

You should keep your pricing method simple at the beginning. A basic cost-plus procedure is probably the easiest to implement. To your production cost, add an acceptable profit margin and the costs of getting the product to the destination (transportation, documentation, duties, etc.) and you have established your price. This pricing process ignores competition and the willingness or ability to pay in the destination market. As your experience and abilities in international marketing increase, you may want to consider more complex pricing strategies to improve your competitive position or expand your market, but the cost-plus method is a good starting point.

An easy way to implement a cost-plus pricing procedure is to use a pro forma invoice. The term "pro forma" indicates the invoice is a quotation, although it looks identical to an invoice that would be used in the case of a real sale. The invoice contains information about the product, prices, shipping methods and costs, means of payment, insurance, and delivery instructions. A properly designed pro forma invoice form can be helpful in developing a price quotation procedure when using the cost-plus method.

Since a pro forma invoice is viewed as a legal offer to sell, it is important that information on the invoice be correct. Keep in mind that certain terms are used in international trade that contractually create an obligation for the seller. Many of the books listed at the end of this publication have glossaries that define specific terms. Your pro forma invoice must use these terms correctly to be an effective price quotation mechanism.

How do I get paid?

The first step in arranging for payment in international transactions is to find a bank with an international trade department. This should be fairly easy. Such units are becoming more common as U.S. export opportunities expand and banks continue to consolidate.

Like domestic sales, payment for international sales can be made in a variety of forms. Terms of payment and credit are important competitive tools in international trade, just as they are in the domestic market. The problem is that getting reliable information on a buyer's credit worthiness is much more difficult. As a seller, you can specify payment in advance and in U.S. dollars before any product is shipped. This eliminates virtually all of the currency exchange rate problems and nonpayment risk to you as a seller. As you might guess, this is not the preferred method for most buyers. Buyers also need some form of assurance they will receive the product as promised.

A common way to arrange for payment of goods internationally is with a letter of credit. A letter of credit is essentially a document whereby a bank substitutes its credit worthiness for that of the buyer. The seller can request that a letter of credit be confirmed by a U.S. bank. The bank agrees to pay when specified documents (typically those showing the goods have been shipped according to the buyer's orders) are presented to the bank. The bank can refuse to pay if the terms and conditions are not complied with completely and accurately.

Letters of credit provide some protection for both the seller and buyer operating in an uncertain situation, and, thus, serve the needs of both parties. Letters of credit are a popular method of payment in international trade, especially if the buyer and seller are not familiar with each other. Fees associated with letters of credit are often fixed regardless of the face amount. These fees range from $250 to $500 for each letter of credit. Thus, letters of credit can be relatively expensive if transaction amounts are small.

Exchange rate risk is also a concern when dealing with international transactions. If payment is made in the currency of the buyer, you must exchange the currency for U.S. dollars. For some currencies, daily exchange rate fluctuations can be dramatic. The easiest way to deal with exchange rates is to specify payment in U.S. dollars. If this is not possible, contact your banking organization to get some sense of the risk associated with exchange rate fluctuations and methods of transferring that risk.

Summary

Getting involved in international marketing has several potential advantages. The export market may provide expansion opportunities that are simply not available in the domestic market. Export marketing can have a diversifying impact on revenues without adding product lines significantly different from what you currently produce. The international market offers a unique challenge, and improving your international marketing skills can have a positive impact on your entire operation. Finally, with the changes that are currently taking place regarding free trade, competing on the international market may be a fact of life for all businesses. The best defense may be to develop an active global offense.

For further reading

Delphos, William A., ed. 1990. *The World Is Your Market: An Export Guide for Small Business.* Washington, D.C.: Braddock Communications.

Ewert, Donald E. 1987. *A Guide to International Shipping.* International Trade Institute, 5055 North Main Street, Dayton, OH 45415.

Gordon, John S., and Jack R. Arnold. 1988. *Profitable Exporting: A Complete Guide to Marketing Your Products Abroad.* John Wiley & Sons, 605 Third Avenue, New York, NY 10158-0012.

Interagency Task Force on International Trade. 1988. *Exporter's Guide to Federal Resources for Small Business.* GPO: 045-000-00250-1, U.S. Government Printing Office - Publications, Superintendent of Documents, Washington, D.C. 20402.

Searing, James E. 1992. *The Ernst and Young Resource Guide to Global Markets.* John Wiley & Sons, 605 Third Avenue, New York, NY 10158-0012.

U.S. Department of Agriculture, Foreign Agricultural Service. *Agxport Action Kit.* AgExport Connections, Room 4939 South Building, Washington, D.C. 20250-1000 (202) 720-7103.

U.S. Department of Commerce. 1992. *A Basic Guide to Exporting.* GPO: 003-009-00604-0, U.S. Government Printing Office - Publications, Superintendent of Documents, Washington, D.C. 20402.

To order copies of this or other University of Idaho College of Agriculture publications, contact the University of Idaho Cooperative Extension System office in your county or write to Agricultural Publications, Idaho Street, University of Idaho, Moscow, Idaho 83844-2240 or call (208) 885-7982.

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Publications and organizations
for nurseries, landscapers, and groundskeepers

D. L. Barney and J. F. Guenthner

Finding information on production, sale, and use of nursery plants can be frustrating and difficult. This list of publications and organizations was compiled to assist nurseries, landscapers, and groundskeepers in gathering the information they need. In some cases, particularly with large books, a brief description of the publication is supplied to provide a better understanding of its contents. The source of the publication is given at the end of each entry. Usually an address for ordering federal and state government publications is supplied; commercially printed books may be ordered through your neighborhood bookseller.

Although every effort has been made to include pertinent, up-to-date information in this guide, new publications are constantly being created and older ones going out of print. Nursery professionals should regularly seek out current information pertaining to their enterprises.

Books and pamphlets

General horticulture

Arboriculture: Care of Trees, Shrubs, and Vines in the Landscape. R. Harris. 1983. 720 pages. Written for professionals and students; provides a comprehensive guide to plant care. Prentice Hall, Inc., Englewood Cliffs, NJ.

Cold Hardiness in Woody Landscape Plants: Its Role in Winter Survival and How to Maximize It. CIS 867. D. Barney and M. Colt. 1990. 2 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Controlling Sunscald on Trees and Vines. CIS 869. D. Barney et al. 1990. 2 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Homeowners' Guide to Fruit Tree Fertilization. CIS 866. M. Colt et al. 1990. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

How to Plan, Plant, and Care for Windbreak, Reforestation, and Conservation Plantings. Misc. Pub. 13. R. Dumroese and D. Wenny. Revised 1988. 26 pages. Forest, Wildlife, and Range Experiment Station, College of Forestry, Wildlife, and Range Sciences, University of Idaho, Moscow, ID 83843-4199.

Irrigation. 5th ed. C. Pair et al. 1983. 686 pages. For beginners or experts; emphasizes water conservation through irrigation system design, operation, and maintenance. Irrigation Association, Arlington, VA.

New Pronouncing Dictionary of Plant Names. 1964. 63 pages. References 3,000 plant names, providing pronunciation and definitions. Florists' Publishing Co., 111 North Canal Street, Chicago, IL 60606-7276.

Plant Science: Growth, Development, and Utilization of Cultivated Plants. H. Hartman et al. 1988. 720 pages. Written for professionals and students. Discusses botany, plant growth and development, and the production of food, forage, and fiber crops. Prentice Hall, Englewood Cliffs, NJ.

Plant Your Trees Right. PNW 33. F. Pitkin and V. Burlison. Revised 1982. 11 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Quality Apples from Your Backyard Tree. CIS 670. W. Kochran and A. Boe. 1983. 3 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Tree Biology and Tree Care: A Photo Guide. A. Shigo. 1987. 137 pages. Introduces tree biology and care, as well as discussing the problems and treatments of trees in the U.S. and Europe. Shigo & Trees Assoc., Durham, NH.

Tree Maintenance. P. Pirone, J. Hartman, and M. Sall. 1988. 528 pages. Discusses tree care in nontechnical language. Oxford Press, Inc., New York, NY.

Tree Pruning: A Worldwide Photo Guide. A. Shigo. 1989. 192 pages. Provides information on tree pruning and health. Shigo & Trees Assoc., Durham, NH.

University of Idaho College of Agriculture
Cooperative Extension System ▮ Agricultural Experiment Station ▮ CIS 950

Using Bark and Sawdust for Mulches, Soil Amendments, and Potting Mixes. CIS 858. D. Barney and M. Colt. 1991. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Winter Protection for Containerized Nursery Stock. CIS 892. D. Barney. 1991. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Your Christmas Tree. CIS 141. D. White and D. Hanley. 1982. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Soils and nutrition

Containers and Growing Media: The Container Tree Nursery Manual, Vol. 2. USDA Forest Service Agriculture Handbook 674. T. Landis et al. 1990. 88 pages with photos. Detailed information on containers and growing media used for containerized forest tree seedling production. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325.

Fertilization Facts for Christmas Tree Growers. FS087. M. Vodak and R. Flannery. 1985. 2 pages. Cooperative Extension Service, Cook College, Rutgers University, New Brunswick, NJ 08903.

Fertilizer Primer: Terminology, Calculations, and Application. CIS 863. R. Mahler and R. McDole. 1990. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Fertilizer Questions. EXT 686. R. Gavlak. 1988. 22 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Fertilizing Shade and Ornamental Trees. EXT 616. R. McDole et al. 1982. 7 pages. Agricultural Publications, Idaho Street, Moscow, ID 83843-4196.

Seedling Nutrition and Irrigation: The Container Tree Nursery Manual, Vol. 4. USDA Forest Service Agriculture Handbook 674. T. Landis et al. 1989. 119 pages with color photos. Detailed information on irrigation and fertilization practices for containerized forest tree seedlings. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325.

Soil Sampling. EXT 704. R. Mahler and R. McDole. 1989. 10 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Soil Testing and Fertilizer Applications for Nursery Management and Production. AG-BU-2830. 1986. B. Swansen et al. 20 pages. Although written for the eastern U.S., contains good general information on fertilizers and their application. Minnesota Agricultural Extension Service, Distribution, Room 3 Coffey Hall, 1420 Eckles Ave., University of Minnesota, St. Paul, MN 55108.

Soils: An Introduction to Soils and Plant Growth. 6th ed. R. Miller and R. Donahue. 1990. 752 pages. A reference written for novices, experts, and students. Discusses the nature of soils and the effects of soil types and management techniques on plant growth. Prentice Hall, Englewood Cliffs, NJ.

Plant materials

Azaleas. F. Galle. 1987. 486 pages. Written for growers and nurserymen and describes species and cultivars. Landscaping uses and maintenance are discussed. Timber Press, Portland, OR.

Complete Manual for Perennial Groundcovers. D. MacKenzie. 1989. 400 pages. Describes the selection, use, and care of groundcovers. Prentice Hall, Englewood Cliffs, NJ.

Conifers. 2nd ed. D. van Gelderen and J. van Hoey Smith. 1989. 356 pages. Describes the botanical characteristics, distribution, and classification of cultivated conifers. Information on natural relationships and geographical ranges is provided. Timber Press, Portland, OR.

Dwarf Fruit Trees for the Home Orchard. CIS 268. A. Boe. 1975. 4 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Encyclopedia of Rhododendron Hybrids. P. Cox and K. Cox. 1988. 354 pages. Written for professionals; provides information on the characteristics of 2,000 hybrids. Timber Press, Portland, OR.

Gardening with Native Plants in the Pacific Northwest. A. Kruckeberg. 1982. 252 pages. Written for professionals or novices; discusses the characteristics, distribution, and landscaping/gardening uses of plants native to the Pacific Northwest. University of Washington Press, Seattle, WA.

A Handbook of Annuals and Bedding Plants. G. Rice. 1986. 273 pages. Written for professionals; provides information on the culture of hardy and half-hardy annuals. Timber Press, Portland, OR.

Herbaceous Perennial Plants: A Treatise on Their Identification, Culture, and Garden Attributes. A. Armitage. 1989. 640 pages. Provides information on the description, cultural requirements, and propagation of more than 2,700 herbaceous perennial plants. All hardiness zones are discussed. Varsity Press, Watkinsville, GA.

The Hillier Color Dictionary of Trees and Shrubs. H. Hillier. 1981. 300 pages. Provides a brief description and guide to care of 3,500 landscape plants. There are 600 color photos. Trafalger Square/David & Charles, Inc., North Pomfret, VT.

Hortus Third: A Concise Dictionary of Plants Cultivated in the U.S. and Canada. L.H. Bailey Hortorium Staff. 1976. MacMillan Publishing Co., New York, NY.

Japanese Maples. 2nd ed. J Vertrees. 1987. 190 pages. Describes history, propagation, and maintenance of Japanese maples. Timber Press, Portland, OR.

Lilacs: The Genus Syringa. J. Fiala. 1988. 350 pages. Written for gardeners; discusses the history, taxonomy, propagation, and culture of lilacs. Timber Press, Portland, OR.

Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses. 4th ed. M. Dirr. 1990. 826 pages. Provides detailed information on the characteristics, use, and propagation of more than 1,100 species and 200 cultivars of woody ornamental plants. Stipes Publishing Co., Stillwater, OK.

Manual of Cultivated Conifers. G. Krussmann. 1985. 400 pages. Describes and provides photos and line drawings of more than 600 conifer species and 2,100 varieties and cultivars. Timber Press, Portland, OR.

Manual of Dwarf Conifers. H. Welch. 1976. 493 pages. Provides written descriptions and photographs of dwarf conifers. Theophrastus, Little Compton, RI.

Manual of Herbaceous Ornamental Plants. 3rd ed. S. Still. 1988. 52 pages. Written for professionals and students; provides information on herbaceous annuals, perennials, bulbs, ornamental grasses, and hardy ferns. Stipes Publishing Co., Champaign, IL.

Native Trees, Shrubs, and Vines for Urban and Rural America: A Planting Design Manual for Environmental Designers. G. Hightshoe. 1987. 832 pages. Provides information on more than 250 woody plants that are native to the U.S. and their use in landscapes. Van Nostrand Reinhold, New York, NY.

Ornamental Grasses: The Amber Wave. C. Otteson. 1989. 240 pages. Discusses selection, establishment, and maintenance of more than 70 types of ornamental grasses. McGraw-Hill Publishing Co., New York, NY.

Photographic Manual for Woody Landscape Plants: Form and Function in the Landscape. M. Dirr. 1978. 378 pages. Provides photos and descriptions of ornamental plants. Stipes Publishing Co., Stillwater, OK.

Plants for Ground Cover. G. Thomas. 1990. 283 pages. Describes shrubs, climbers, herbaceous plants, and grasses. Methods of maintaining weed-free cover crops with reduced herbicide usage are described. Timber Press, Portland, OR.

The Poinsettia Manual. P. Ecke and O. Matkin. 1976. Paul Ecke Poinsettias, Encinitas, CA 92924.

Rhododendrons in America. T. Van Vleet. 2nd ed. 1986. 192 pages. Describes 300 rhododendron cultivars and discusses selection, establishment, and maintenance. Binford & Mort Publishing, Portland, OR.

Rock Gardening: A Guide to Growing Alpines & Other Wildflowers in the American Garden. H. Foster. 1982. 466 pages. Timber Press, Portland, OR.

Plant propagation

Handbook of Plant Cell Culture, Vol. 6: Perennial Crops. Z. Chen et al. 1989. 528 pages. Written for researchers, breeders, and corporate scientists. Deals with the technical aspects of tissue culturing perennial plants. McGraw-Hill Publishing Co., New York, NY.

Plant Propagation: Principles and Practices. 5th ed. H. Hartman, D. Kester, and F. Davies. 1990. 647 pages. For college students and professionals; deals with theoretical and practical aspects of plant propagation. Prentice Hall, Englewood Cliffs, NJ 07632.

Plants from Test Tubes: An Introduction to Micropropagation. 2nd ed. L. Kyte. 1987. 132 pages. An introductory text on tissue culture written for the commercial propagator. Discusses how to select material for tissue culture and how to design, equip, and operate a propagation facility. Timber Press, Portland, OR.

Practical Woody Plant Propagation for Nursery Growers, Vol. 1. B. McDonald. 1986. 660 pages. Covers propagation from seeds, cuttings, layering, grafting, and tissue culturing. Timber Press, Portland, OR.

The Reference Manual of Woody Plant Propagation. M. Dirr and C. Heuser. 1987. 239 pages. Has general sections on various methods of plant propagation and detailed information on the seed, cutting, grafting, budding, and tissue culture propagation of 284 genera of woody plants. Varsity Press, Inc., Athens, GA.

Seeds of Woody Plants in North America. J. Young and C. Young. 1992. 407 pages. Provides detailed information on seed collection and propagation for 386 genera. Dioscorides Press, Portland, OR.

Pests, diseases, and weeds

Balsam Wooly Adelgid: A Pest of True Fir Species. EB 1456. A. Antonelli. 1992. 3 pages. Bulletin Office, Cooperative Extension, Cooper Publications Bldg., Washington State University, Pullman, WA 99164-5912.

Beneficial Organisms Associated with Pacific Northwest Crops. PNW 343. R. Stoltz et al. 1990. 8 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Biology and Control of Douglas-fir Needle Midges in Christmas Tree Plantations. EB 1014. A. Antonelli. 1981. 2 pages. Bulletin Office, Cooperative Extension, Cooper Publications Bldg., Washington State University, Pullman, WA 99164-5912.

Compendium of Apple and Pear Diseases. A. Jones and H. Aldwinkle, eds. 1990. 100 pages. Describes diseases of domestic, fruit-producing pears and apples. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Compendium of Elm Diseases. R. Stipes and R. Campana, eds. 1981. 96 pages. Includes sections on insect and mite pests, as well as diseases. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Compendium of Ornamental Foliage Plant Diseases. A. Chase. 1987. 92 pages. Discusses diseases and disorders caused by pathogens, nematodes, and environmental factors. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Compendium of Rhododendron and Azalea Diseases. D. Coyier and M. Roan. 1986. 65 pages. Describes diseases and disorders caused by pathogens, nematodes, algae, and environmental factors. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Compendium of Rose Diseases. K. Horst. 1983. 50 pages. Describes diseases and disorders caused by pathogens and environmental factors. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Compendium of Turfgrass Diseases. R. Smiley. 1983. 102 pages. Discusses infectious and noninfectious diseases caused by pathogens, nematodes, insects, algae, and chemicals. APS Press, 3340 Pilot Knob Road, St. Paul, MN 55121.

Crop Protection Chemicals Reference. 1990. 6th ed. 2,226 pages. Describes the use and safe handling of agricultural chemicals. More than 560 products are described. J. Wiley & Sons, Inc., New York, NY.

Diseases of Forest and Shade Trees in the United States. USDA Forest Service Agricultural Handbook 386. Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325. Refer to U.S. Government Printing Office: 1978-796-320/ 114 Region 10.

Diseases of Shade Trees. T. Tattar. 1989. 391 pages. Introductory text written for professionals or students. Discusses both infectious and non-infectious diseases. Academic Press, New York, NY.

Diseases of Trees and Shrubs. W. Sinclair, H. Lyon, and W. Johnson. 1987. 575 pages. Excellent resource for identifying diseases and physiological disorders of ornamental and forest trees and shrubs. Many color photos. Comstock Publishing Assoc., Ithaca, NY.

Diseases of Woody Ornamental Plants and Their Control in Nurseries. R. Jones and R. Lambe. 130 pages. Publications Office, Ag Communications, North Carolina State University, Raleigh, NC 27607.

Field Guide to Diseases and Insect Pests of Idaho and Montana Forests. Hagle et al. 1987. 123 pages. USDA Forest Service, State & Private Forestry, Northern Region, P.O. Box 7669, Missoula, MT 59807.

Fundamentals of Pesticides: A Self-Instruction Guide. 2nd ed. G. Ware. 1986. 274 pages. Describes the chemistry and action of pesticides and discusses safety precautions. Thomson Publications, Fresno, CA.

Growing Healthy Seedlings: Identification and Management of Pests in Northwest Forest Nurseries. P. Hamm, S. Campbell, and E. Hansen. 1990. Describes identification and management of diseases and pests in conifer seedling nurseries. Forest Research Laboratory, College of Forestry, Oregon State University, Corvallis, OR 97331.

Herbicide Injury to Trees and Shrubs: A Pictorial Guide to Symptom Diagnosis. J. Derr and B. Appleton. 1988. 72 pages. Written for professionals; describes the symptoms and diagnosis of herbicide injuries in nursery and landscape trees. Blue Crab Press, Virginia Beach, VA.

Insects That Feed on Trees and Shrubs. 2nd ed. W. Johnson and H. Lyon. 1988. 528 pages. For professionals and students; describes the diagnosis of plant disorders caused by insect pests. Excellent practical guide for diagnosing insect problems. Comstock Publishing Assoc., Ithaca, NY.

Managing Weeds and Vegetation in Christmas Trees. PNW 219. R. William and K. Brown. 1987. 8 pages. Publications Orders, Agricultural Communications, Administrative Services A422, Oregon State University, Corvallis, OR 97331-2119.

Nursery and Landscape Weed Control Practices. R. Rice. 1986. 264 pages. For professionals; discusses physical, cultural, and chemical weed control practices. Thomson Publications, Fresno, CA.

Ortho Problem Solver. Chevron Chemical Company. 1989. 1,052 pages. Provides information on the identification and control of diseases, pests, weeds, and environmental disorders in the landscape and garden. Chevron Chemical Co. Ortho Books, 6001 Bollinger Canyon Road, San Ramon, CA 94583.

Recognition and Management of Christmas Tree Pests. EB 0735. A. Antonelli. 1980. 17 pages. Bulletin Office, Cooperative Extension, Cooper Publications Bldg., Washington State University, Pullman, WA 99164-5912.

Rhabdocline Needle Cast of Douglas-fir. EB 1306. R. Davidson and R. Byther. 1985. 2 pages. Bulletin Office, Cooperative Extension, Cooper Publications Bldg., Washington State University, Pullman, WA 99164-5912.

The Standard Pesticide User's Guide. B. Bohmont. 1989. 560 pages. Discusses insects, weeds, diseases, environmental considerations, safety precautions, laws and regulations, calibration, decontamination, and disposal. Prentice Hall, Englewood Cliffs, NJ.

Westcott's Plant Disease Handbook. 5th ed. C. Westcott, revised by K. Horst. 1990. 803 pages. Written for professionals; provides information on the diagnosis and control of more than 200 diseases that affect trees, shrubs, grasses, flowers, and vegetables. Van Nostrand Reinhold, New York, NY.

General nursery production and management

American Standard for Nursery Stock. American Association of Nurserymen. 1990. 33 pages. Lists recommended standards for plant caliper, height, root spread, etc., and is intended to assist in buying and selling field-grown nursery plants. American Association of Nurserymen, 1250 I Street N.W., Suite 500, Washington, DC 20005.

Beginning in the Nursery Business. 3rd ed. J. Pinney and R. Pinney. 1985. 70 pages. For prospective and new nursery operators. American Nurseryman Publishing Co., 111 North Canal Street, Chicago, IL 60606.

Container Nursery Design. 1986. B. Appleton. 122 pages. Written for professionals and students. Discusses site selection and preparation, irrigation, structures, and support areas. American Nurseryman Publishing Co., 111 North Canal Street, Chicago, IL 60606.

Foliage Plant Production. J. Joiner. 1981. 608 pages. Written for professionals or students; provides information on production methods for foliage plants. Prentice Hall, Englewood Cliffs, NJ.

How to Plant Containerized Seedlings for Idaho's Farms and Forests. CIS 528. R. Dumroese, D. Wenny, and R. Mahoney. Revised 1987. 3 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Nursery Management: Administration and Culture. 2nd ed. H. Davidson, R. Mecklenburg, and C. Peterson. 1988. 512 pages. Written for professionals or students; provides a detailed review of the industry from site selection to marketing. Prentice Hall, Englewood Cliffs, NJ.

Nursery Production: Teacher Version. 2nd ed. C. Heuser and R. Stinson. 1989. 216 pages. A looseleaf textbook that discusses necessary personnel skills and training, as well as nursery production practices and marketing. Good introductory text and training resource for employees. Publications Distribution Center, 112 Agricultural Administration Bldg., The Pennsylvania State University, University Park, PA 16802.

Plant Production in Containers. C. Whitcomb. 1989. 633 pages. Written for professionals or students; discusses growth of plants in containers, production techniques, and propagation. Lacebark Publications, Stillwater, OK.

Production of Landscape Plants. C. Whitcomb. 1989. 487 pages. A summary of research findings, experiences, and observations relating to the production of landscape plants. Lacebark, Inc., Stillwater, OK.

Raising Forest Tree Seedlings at Home. PNW 96. A. Parker et al. 1972. 11 pages. Publications Orders, Agricultural Communications, Administrative Services A422, Oregon State University, Corvallis, OR 97331-2119.

Transplanting Native Seedlings. CIS 735. D. White, T. Davis, and R. Mahoney. 1984. 2 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Greenhouses and greenhouse production

Ball Redbook: Greenhouse Growing. V. Ball, ed. 1985. 720 pages. Provides extensive information on structures and general greenhouse operations as well as short sections on specific greenhouse crops. Reston Publishing Co. Inc., Reston, VA 22090.

Building Hobby Greenhouses. PNW 171. 1978. 12 pages. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Greenhouse Operation and Management. 3rd ed. P. Nelson. 1985. Written for professionals. Discusses design, establishment, and operation of greenhouses. Prentice Hall, Englewood Cliffs, NJ.

Hobby Greenhouses in Alberta. Agdex 731-5. 68 pages. Provides information on planning, constructing, and operating a greenhouse. Written for small greenhouse operators and serious hobbyists. Print Media Branch, Alberta Agriculture, 7000-113 Street, Edmonton, Alberta T6H 5T6, Canada.

Managing a Greenhouse. R. Langhan. 1990. 274 pages. Discusses structures, environmental control, materials, handling, crop programming, and business analysis. Halcyon Press, Ithaca, NY.

Retail nurseries and garden centers

Christmas Tree Decorations Made with Fresh Evergreens. H-784. D. Kinzler and R. Askew. 1982. Cooperative Extension Service, North Dakota State University, Fargo, ND 58105.

How to Improve Your Garden Center Merchandising Practices. F. Perkins. 1978. 37 pages. Agricultural Economics and Marketing, Cooperative Extension Service, Cook College, Rutgers University, New Brunswick, NJ 08903.

Profitable Garden Center Management. 2nd ed. L. Berninger. 1982. 418 pages. Discusses management topics as well as the selection and care of plant material. Prentice Hall, Englewood Cliffs, NJ.

The Retail Florist Business. P. Pfahl and P. Pfahl. 1983. 500 pages. 4th ed. Interstate Printers and Publishers, Danville, IL 61382.

Western Garden Book. By the editors of Sunset Books and Sunset Magazine. 1988. 592 pages. An excellent reference for garden centers and homeowners. Provides information on selecting and maintaining landscape and garden plants, basic horticultural practices, and pest control. Numerous garden and landscape plants are described. Sunset Publishing Corporation, Menlo Park, CA.

Landscaping and grounds management

Designing the Natural Landscape. R. Austin. 1984. 165 pages. Provides basic information on designing and planting a natural and functional landscape. Van Nostrand Reinhold, New York, NY.

Designing with Plants. R. Austin. 1982. 192 pages. Provides an introduction to landscape architecture and ornamental horticulture. Van Nostrand Reinhold, New York, NY.

Grounds Maintenance Handbook. H. Conover. 1976. 512 pages. McGraw-Hill, New York, NY.

The Handbook of Landscape Architectural Construction, Vol. I. 2nd ed. M. Nelischer. 1985. 386 pages. Discusses landscape construction, including legal aspects. American Society of Landscape Architects, Washington, DC.

Kerr's Cost Data for Landscape Construction. N. Dietrich. 10th ed. 1990. 219 pages. Written for professionals; discusses unit prices for site development. Van Nostrand Reinhold, New York, NY.

Landscape Architecture: A Manual of Site Planning and Design. J. Simmonds. 1983. 384 pages. For professionals; discusses the site planning process in landscaping. McGraw-Hill, New York, NY.

Landscape Design. L. Hannebaum. 2nd ed. 1989. 416 pages. Written for professionals or students; discusses the basics of landscape design. Prentice Hall, Englewood Cliffs, NJ.

Landscape Planning for Energy Conservation. G. Robinette and C. McClennon, eds. 1983. 224 pages. Written for professionals; discusses the design and development of energy conserving landscapes in the four major geo-regions of North America. Van Nostrand Reinhold, New York, NY.

Landscape Rejuvenation: Remodeling the Home Landscape. B. Appleton. 1988. 131 pages. Written for professionals; discusses methods of remodeling a landscape based upon budget, time, and maintenance concerns. Storey Communications, Pownal, VT.

Landscaping: Principles and Practices. 3rd ed. J. Engels. 1987. 339 pages. For professionals or students. Discusses the development, establishment, and maintenance of a landscape. Delmar, Albany, NY.

Landscaping with Perennials. E. Brown. 1986. 300 pages. Written for professionals; discusses the creation of

year-round landscapes. Provides information on the size and characteristics of recommended plants. Timber Press, Portland, OR.

Lawns: Basic Factors, Construction, and Maintenance of Fine Turf Areas. 3rd ed. J. Vengris. 1982. 195 pages. Written for professionals and students. Discusses variety selection, establishment, and maintenance. Thomson Publications, Fresno, CA.

Residential Landscapes: Graphics, Planning, Design. G. Pierceall. 1984. 468 pages. Written for professionals or students; discusses the planning and design processes that relate to landscape design. Prentice Hall, Englewood Cliffs, NJ.

Residential Landscaping I. 2nd ed. T. Walker. 1990. Written for professionals; discusses landscape design, planning, construction, and planting. Information on landscaping materials is provided. Van Nostrand Reinhold, New York, NY.

Residential Landscaping II: Planting and Maintenance. P. Carpenter. 1983. 143 pages. Discusses planting techniques and maintenance of landscape material. Information on environmental effects and specific plant materials also. PDA Pubs., New York, NY.

Site Design Graphics. M. Kendall. 1989. 512 pages. Written for professionals; discusses the use of computers in designing and planning a landscape project. Van Nostrand Reinhold, New York, NY.

Turfgrass Management. 3rd ed. A. Turgeon. 1987. 416 pages. Introductory text written for beginners. Introduces turfgrass ecosystems and the establishment and maintenance of turf. Prentice Hall, Englewood Cliffs, NJ.

Turfgrass Science and Management. R. Emmons. 1984. 384 pages.For professionals and students; discusses theory behind turfgrass and the establishment and maintenance of turfgrass. Delmar, Albany, NY.

Urban and Community Forestry: A Guide for the Interior Western United States. G. Younker, ed. 1990. 343 pages. Detailed guidelines for developing an urban or community forestry program. Includes chapters on planning, policies, inventories, site evaluations, tree selection and planting, xeriscapes, urban soils, and maintenance. Bulletin Room, Extension Service, Utah State University, Logan, UT 84322-5015.

Water Conservation in Landscape Design & Management. G. Robinette. 1984. 284 pages. For professionals or homeowners; discusses the design and maintenance of landscapes, depending upon the availability of water. Van Nostrand Reinhold, New York, NY.

Water Gardening Basics. W. Uber. 1988. 173 pages. Written for novices and professionals; provides information on the design, installation, and maintenance of garden waterfalls, fountains, and ponds. Dragonflyer Press, Upland, CA.

Your Garden Pond. P. Loiselle. 1987. 138 pages. For landscapers and homeowners. Practical information on design, installation, and maintenance of garden ponds. Howell Books, New York, NY.

General business management

The U.S. Small Business Administration has many publications that discuss organizing, establishing, and managing a business. To locate the nearest office, look in your telephone directory or write to U.S. Small Business Administration, U.S. Courthouse, West 601 First Avenue, 10th Floor East, Spokane, WA 99204.

Custom Rates for Idaho Agricultural Operations. EXP 729. R. Withers and R. Casper. 1991. 12 pages. Discusses methods for calculating machinery costs and lists current rates charged by Idaho custom operators. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Developing a Marketing Plan for Fresh Produce. PNW 241. C. Moulton and L. Burt. 1984. 15 pages. Discusses identifying potential markets, meeting the needs of the market, transportation, selling methods, and evaluation of risks and potential returns. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Economic Feasibility Studies for Agribusiness Firms. EXT 675. R. Schermerhorn and L. Makus. 1987. 8 pages. Reviews situations requiring feasibility analysis; serves as a guide for conducting meaningful feasibility studies. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Financial Analysis of Proposed Farm Adjustments with a Partial Budget. WREP 104. G. Willett and B. Eleveld. 1987. 12 pages. Bulletin Office, Cooperative Extension, Cooper Publications Bldg., Washington State University, Pullman, WA 99164-5912.

Grounds Maintenance Estimating Guidelines. Professional Grounds Management Society. 1990. 28 pages. Resource for beginning or updating a comprehensive cost estimating program for groundskeeping firms. Professional Grounds Management Society, 10402 Ridgland Road, Suite 4, Cockeysville, MD 21030.

Grounds Maintenance Management Guidelines. Professional Grounds Management Society. 1991. 40 pages. A resource manual designed to assist groundskeepers plan and evaluate their operations. Professional Grounds Management Society, 10402 Ridgland Road, Suite 4, Cockeysville, MD 21030.

Grounds Management Forms & Job Descriptions Guide. Professional Grounds Management Society. 1991. 52 pages. Professional Grounds Management Society, 10402 Ridgland Road, Suite 4, Cockeysville, MD 21030.

Hazard Communication Manual: Compliance Guide to the OSHA Hazard Communications Standards. American Association of Nurserymen. 1988. A looseleaf guide to Occupational Safety and Health regulations that apply to manufacturers, distributors, and users of chemicals. Includes a section on developing an employee training program. American Association of Nurserymen, 1250 I Street, N.W., Suite 500, Washington, DC 20005

How to Prepare an Effective Business Plan: A Step-By-Step Approach. 1986. R. Delvaney and R. Howell. 271 pages. Provides a guide to the construction of a business plan. Amacom, New York, NY.

Keeping the Family Business Healthy: How to Plan for Continuing Growth, Profitability, & Family Leadership. J. Ward. 1987. 295 pages. How to provide for

growth, profitability, family leadership, and leadership succession. Jossy-Bass, Inc., San Francisco.

Management for Retail Florists with Applications to Nurseries and Garden Centers. G. Sullivan, J. Robertson, and G. Staby. 1980. 545 pages. W.H. Freeman Co., San Francisco, CA.

Nursery Crops Coding System Manual. American Association of Nurserymen. 1986. 11 pages. Outlines the standards for bar codes used in classifying and labeling nursery stock. Available from American Association of Nurserymen, 1250 I Street, N.W., Suite 500, Washington, DC 20005.

Nursery Growers' Guide to UPC Bar Code Labeling. American Association of Nurserymen. 1986. 16 pages. Provides the details needed to begin the use of bar coding on nursery stock. Available from American Association of Nurserymen, 1250 I Street, N.W., Suite 500, Washington, DC 20005.

Passing Down the Farm: The Other Farm Crisis. D. Jonovic and W. Messick. 1987. 230 pages. Describes methods to maintain business growth and profitability while keeping families and nurseries intact. Jamieson Press, Cleveland, OH.

Principles of Management in Agribusiness. K. Duft. 1979. 469 pages. Provides a comprehensive treatment of managing agricultural businesses. Prentice Hall, Englewood Cliffs, NJ.

Selection and Implementation of a Farm Record System. WREP 99. J. Guenthner and R. Wittman. 1984. 12 pages. Helps growers decide what is needed for a record-keeping system, who will keep the records, what fiscal year to use, and what accounting methods to follow. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Small Business Matters: Topics, Procedures, and Strategies. M. McVicker. 1988. 320 pages. Written for owners and managers; discusses financial and employee management and long-term planning. Chilton Book Co., Radnor, PA.

Starting a Business in Idaho. 29 pages. Idaho Department of Commerce, 700 West State Street, Boise, ID 83720.

The Costs of Owning and Operating Farm Machinery in the Pacific Northwest PNW 346. R. Smathers and G. Willett. 1989. 118 pages. Identifies list prices of new machinery, estimates annual and per-hour costs of owning and operating machinery, and identifies the relationship between the extent of machinery use and per-hour costs. Agricultural Publications, Idaho Street, University of Idaho, Moscow, ID 83843-4196.

Uniform Chart of Accounts: For Nursery Production, Landscape, and Retail Operations. Horticultural Research Institute. 1971. 42 pages. Provides standards for charts of accounts for nursery accounting systems. Horticultural Research Institute, 1250 I Street, N.W., Washington, DC 20005.

Periodicals and newsletters

Agrichemical Age. HBJ Farm Publications, 731 Market Street, San Francisco, CA 94103-2011. Monthly trade journal for dealers, applicators, and consultants who deal with pesticides and other farm chemicals. Traditional and biological pesticide, as well as related registrations and legislation are discussed.

American Nurseryman. American Nurseryman Publishing Co., 111 N. Canal Street, Chicago, IL 60606-7276. Bimonthly magazine oriented to commercial ornamental nursery production. Articles on cultural practices, business management, labor, products, research, legislation, markets, meetings, and trends in commercial ornamental nursery industry. Frequently includes catalogs of books and videotapes that deal with nursery production and marketing.

Forest Nursery Notes. USDA Forest Service, P.O. Box 3623, Portland, OR 97208. Newsletter oriented to the commercial production of tree seedlings. Articles discuss cultural practices, plant material, research, and available literature.

Greenhouse Grower. Meister Publishing Co., 37733 Euclid Ave., Willoughby, OH 44094. Magazine. 14 issues a year; oriented to commercial greenhouse production. Discusses cultural practices, plant material, products and equipment, business and marketing, legislation, research, and meetings.

Greenhouse Manager. Branch-Smith Publishing, 120 St. Louis Ave., Fort Worth, TX 76104. Monthly magazine oriented to commercial greenhouse production of bedding plants, flowers, foliage, and vegetables. Discusses cultural practices, plant material, products and equipment, marketing and business management, legislation, and events of interest.

Grower Talks. Geo. J. Ball Co., 250 Town Road, West Chicago, IL 60185. Oriented to commercial greenhouse production.

Horticulture: The Magazine of American Gardening. Horticulture Limited Partnership, 20 Park Plaza, Suite 1220, Boston, MA 02116. Specializing in nontechnical articles dealing with general horticulture and gardening. Some small fruit topics covered. Oriented to hobbyists and home gardeners.

Irrigation Journal. Gold Trade Publications, Inc., 6913 Valjean, Van Nuys, CA 91406. Bimonthly publication is the official magazine of the Irrigation Association. Articles discuss irrigation systems and products, legislation, and markets. Oriented to commercial farmers.

Landscape Management. Edgell Communications, Inc., 1 East First Street, Duluth, MN 55802. Monthly trade magazine oriented to golf and landscape professionals.

Northern Horticulture. University of Idaho Research and Extension Center, 2105 N. Boyer, Sandpoint, ID 83864. A quarterly newsletter oriented toward low-input and sustainable agriculture and the commercial production of woody ornamental, Christmas tree, and small fruit crops. Articles address cultural practices, research, and current events.

Nursery Manager. Branch-Smith Publishing, 120 St. Louis Ave., Fort Worth, TX 76104. Monthly magazine oriented toward general ornamental and bedding plant nursery production, landscapers, and retail nurseries and garden centers. Articles discuss

business and marketing, plant selection, products, legislation, and meetings.

Organic Gardening. Rodale Press, Inc., 33 E. Minor Street, Emmaus, PA 18098. Monthly magazine of cultural practices, products, research, and legislation that apply to organic gardening. Oriented to hobbyists, home gardeners, and small farms.

Ornamentals Northwest. c/o Extension Ornamentals Specialist, Department of Horticulture, Oregon State University, Corvallis, OR 97331. Newsletter oriented toward the ornamental nursery industry.

Pacific Coast Nurseryman & Garden Supply Dealer. Cox Publishing Co., 306 W. Foothill Blvd., P.O. Box 1477, Glendora, CA 91740.

Proceedings of the International Plant Propagators Society. International Plant Propagators Society, P.O. Box 910, Arlington, VA 22216-0910. Yearly compilations of technical papers providing detailed information on current research in plant propagation.

Produce Business. Multipress International Inc., 301 Yamato Road, Suite 4110, Boca Raton, FL 33431. Monthly magazine aimed primarily at marketers of fresh fruits, vegetables, and ornamentals. Can be a valuable source of information for those interested in the marketing chain from grower to consumer.

The Packer. Vance Publishing Corporation, 7950 College Blvd., Overland Park, KS 66210. Horticultural trade newspaper for growers, shippers, brokers, wholesalers, retailers, and food service people interested in marketing, economics, legislation, consumer attitudes, and other issues that affect the market for fresh produce and ornamentals.

The Plant Propagator. International Plant Propagators Society, P.O. Box 910, Arlington, VA 22216-0910. Quarterly newsletter by the International Plant Propagators Society. Contains articles on plant propagation, current events, and book reviews.

Woodland Notes. College of Forestry, Wildlife, and Range Sciences, University of Idaho, Moscow, ID 83843-4199. Quarterly newsletter oriented toward tree seedling production and management of Christmas tree farms and woodlots. Information is presented on cultural practices, pest and disease management, and events of current interest.

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Organizations

American Association of Nurserymen, 1250 I Street N.W., Washington, DC 20005.

American Horticultural Society. Box 0105, Mt. Vernon, VA 22121.

American Rose Society, P.O. Box 30000, Shreveport, LA 71130.

American Society of Consulting Arborists, 700 Canterbury Road, Clearwater, FL 34624.

Associated Landscape Contractors of America, 1750 Old Meadow Road, McLean, VA 22102.

Association of Professional Landscape Designers, 221 Morris Road, Ambler, PA 19002.

Idaho Department of Agriculture, 2270 Old Penitentiary Road, Boise, ID 83712.

Idaho Nursery Association, c/o Carla Carter, Executive Director, 2104 Floating Feather Rd., Eagle, ID 83616.

Idaho Organic Producers Association, c/o Tim Sommer, 11741 Bullock Lane, Middleton, ID 83644.

International Plant Propagators Society, Western Region, c/o Wilbur Bluhm, 743 Linda Ave. N.E., Salem, OR 97303.

International Society of Arboriculture, P.O. Box 71, Urbana, IL 61801.

National Arborist Association, 3537 Stratford Road, Wantagh, NY 11793.

Perennial Plant Association, c/o Stephen Still, 2001 Fyffe Court, Columbus, OH 43210.

Professional Grounds Management Society, 10402 Ridgland Road, Suite 4, Cockeysville, MD 21030.

The American Rhododendron Society, 617 Fairway Drive, Aberdeen, WA 98520.

U.S. Small Business Administration — To locate the nearest office, look in your telephone directory or write to U.S. Small Business Administration, U.S. Courthouse, West 601 First Avenue, 10th Floor East, Spokane, WA 99204.

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